CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, April 8, 1909.

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CONSTRUCTION NEWS.

Plans and Specifications on File.

(* *denotes that this work is advertised in Engineering News.*)

The following plans (P.) and Specifications (S.) are on file and may be seen at office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	See issue.
4-13	Macadam, Trenton, N. J....(S.)	4- 1
4-15*	Breakwater, Buffalo, N. Y..(S.)	3-25
4-16*	Crematory (Garbage), West Point, N. Y. ....(S.)	4- 1
4-17	Hospital, New York........(S.)	3-18
4-17	Building, New York..........(S.)	4- 1
4-19	Pavement, Fulton, N. Y.....(S.)	3-25
4-19*	Lock gates, Nashville, Tenn.(S.)	3-18
4-20*	Sewers, Auburn, N. Y........(S.)	3-25
4-21*	Sewer, mains, Birmingham, Ala. (P. & S.)	3-25
4-24	Roof (Buildings), New York..(S.)	4- 1
4-24	Hospital, Bremerton, Wash..(S.)	3-25
4-26	Buildings, North Chicago, Ill.(S.)	3-25
4-26*	Pass, Wheeling, W. Va..(P.& S.)	4- 1
4-27*	Rebuilding bridge, Newburyport, Mass. ....(S.)	4- 8
5- 8	Seawall, dredging, Norfolk, Va. ....(S.)	4- 8
5-22	Dry dock, Hawaii..........(S.)	3-25
5-26*	Lock, Vicksburg, Miss......(S.)	4- 1
6- 1*	Pipe and specials, Philippines. ....(P. & S.)	3-25

List of Contracts Pending.

LIGHT, HEAT AND POWER PLANTS.

4-10	Power plant, Pine City, Minn....	3-25
4-13*	Conduit, Sioux City, Iowa......	3-18
4-13*	Lighting, Portsmouth, Va......	3-11
4-13	Towers, Winnipeg, Man.........	4- 8
4-14	Motor pit, tunnels, etc., New York	4- 1
4-15	Transformers, etc., Winnipeg, Man	3-11
4-15	Lamp standards, San Jose, Cal...	3-18
4-19	Wiring, Seattle, Wash..........	4- 1
4-19	Elec. equipment, New York	4- 8
4-23*	Conduit, etc., Newbern, N. C....	4- 1
4-24*	Light plant, Ft. D. A. Russell, Wyo.	4- 1
4-26*	Engines, generators, etc., Boston, Mass.............	4- 1
4-26*	Power plant, Wilkes-Barre, Pa..	3-25
4-30	Cable, Toronto, Ont............	4- 8
4-30*	Gas well, Medicine Hat, Alta....	4- 8
4-30*	Lamp standards, etc., Wash., D.C.	4- 8
5- 5	Steam mains, Danville, Ill......	4- 1

BRIDGES.

4-10	Bridges, McAlester, Okla.	3-25
4-10	Culvert forms, Panama.......... ....(U. S. Poss.)	4- 8
4-12	Bridge, Youngstown, Ohio.......	3-25
4-12	Bridge, Camden, N. J..........	3-25
4-12	Bridge, Sandpoint, Idaho........	4- 1
4-12	Bridge, Los Angeles, Cal........	4- 1
4-12	Bridge work, Stockton, Cal......	4- 8
4-13	Bridge work, Elyria, Ohio.......	4- 1
4-14	Bridge, Slingerlands, N. Y......	3-25
4-14	Abutments, Guthrie, Okla.......	4- 8
4-15	Bridge work, New York.........	4- 8
4-16	Bridge, Northbend, Ohio........	4- 8
4-16	Bridge work, Wilkes-Barre, Pa..	4- 8
4-16	Bridges, etc., Logan, Ohio......	4- 1
4-18	Bridge, South Renovo, Pa......	4- 8
4-17	Bridge, Greenfield, Ind.........	4- 8
4-19	Bridge girder, Zanesville, Ohio...	4- 1
4-20	Bridges, Lincoln, Neb...........	4- 1
4-20	Substructures, etc., Marietta, O.	4- 8
4-20	Bridge, Hamilton, Ohio..........	4- 8
4-24*	Bridge, Cedar Rapids, Iowa.....	4- 8
4-27	Rebuilding bridge, Newburyport, Mass.....................	4- 8
5- 4	Bridge, Savannah, Ga..........	3-25

BUILDINGS.

4-10	Hospital, Lethbridge, Alta.......	4- 1
4-10	Buildings, etc., Syracuse, N. Y..	4- 1
4-10	Hospital, Lethbridge, Alta.......	4- 8
4-12	Ice plant, etc., Canton, O (Mfg Pl.)	4- 8
4-12	Hospital, Ft. Crook, Neb........	4- 1
4-12	Assay office (superstr.), New York	3-11
4-12	Schools, New York.............	4- 1
4-13	Building materials, New York....	4- 1
4-14	Post-office, Pittsburg, Pa........	3-18
4-14	Hospital, Ft. Sam Houston, Tex.	4- 8
4-15	School, Richmond, Ind..........	4- 8
4-15	Court-house, Plymouth, Ind.....	4- 8
4-15	Building, New York............	4- 8
4-15*	Post-office, Fayetteville, N. C....	3-18
4-16	Engine house, New York	4- 8
4-16	Laundry (Mfg. Pl) Columbus, O.	4- 1
4-16	Refrig. plant, Hartwell, O. (Mfg. Pl.)......................	4- 8
4-17	Building, New York............	4- 1
4-17	Hospital, New York.............	3-18
4-19	Post-office, Sumter, S. C.........	3-18
4-19	Heating, etc., New York	4- 8
4-20*	Post-office, Kearney, Neb.......	3-18
4-20*	Quarters, Ft. Morgan, Ala.......	3-25
4-20	Storehouses, Philadelphia, Pa....	4- 1
4-20	Court-house, Columbia, Ind.....	4- 8
4-20	City Hall, Decatur, Ind.........	4- 8
4-21	Post-office, Manistee, Mich......	3-25
4-22	Schools, Canton, Ohio...........	4- 1
4-22	Post-office, Willimantic, Conn....	3-25
4-23	Cold storage plant, Delaware, O. (Mfg. Pl.)...................	4- 8
4-24	Roof, New York...............	4- 1
4-24	Hospital, Bremerton, Wash.....	3-25
4-26	Buildings, North Chicago, Ill....	3-11
4-26*	Post-office, Barre, Vt.	3-25
4-26	Building, Schenectady, N. Y....	4-26
4-29	Quarters, Ft. Missoula, Mont....	4- 8
4-28*	Post-office, Kewanee, Ill.........	4- 1
5- 1*	Post-office, Michigan City, Ind...	4- 1
5- 3	Post-office, Lake Charles, La....	4- 1
5-10	Post-office, Yazoo City, Miss....	4- 8
5-12*	Post-office, Danville, Ill.........	4- 8

WATER-WORKS.

4- 9	Cast-iron pipe, Richland Center, Wis	3-18
4- 9	Reservoir, South Bend, Ind......	4- 1
4-10	Tank, etc., Gloucester, Va.......	4- 8
4-12	Pipe, Galveston, Tex............	4- 8
4-12*	Pipe, East Orange, N. J.........	4- 8
4-12	Pipe, etc., Lamar, Colo.........	4- 8
4-12	Pump head, Eldora, Iowa........	4- 8
4-12	Well, Fort Crook, Neb..........	4- 1
4-13	Water mains, Saskatoon, Sask...	4- 1
4-14	Valves, etc., New York.........	4- 8
4-15	Well, Goodrich, N. Dak........	4- 8
4-15	Rock tunnel, New York.........	4- 8
4-15	Water system, Harlan, Mont....	4- 1
4-16*	Water pipe, Warwick, N. Y......	4- 8
4-17	Water pipe, East Cleveland, Ohio.	4- 8
4-19	Water system, Faunsdale, Ala...	4- 8
4-19	Reservoir, Ogden, Utah..........	4- 8
4-20	Pumping station, St. Louis, Mo..	4- 8
4-20	Water-works, Saint Henry, Ohio.	4- 1
4-20*	Water-pipe, McPherson, Kan....	3-25
4-21*	Cast-iron pipe, Rome, N. Y......	4- 1
4-21	Pump, etc., Panama (U. S. Poss.)	4- 8
4-22	Water-works, Put-in-Bay, Ohio..	4- 1
4-26	Water-works, Sikeston, Mo......	4- 8
4-27*	Brass goods, New Orleans, La...	4- 1
5- 5	Pumping machinery, Petaluma, Cal.	2-11
6- 1*	Pipe and specials, Philippines (U. S. Poss.)	3-25

SEWERS.

4- 9*	Disposal plant, Oxford, Ohio.....	4- 1
4- 9	Sewers, Seattle, Wash.	3-25
4- 9	Sewer pipe, Hutchinson, Kan...	4- 8
4-12	Sewers, Cicero, Ill..............	4- 8
4-12	Sewer, Bay City, Mich..........	4- 8
4-12	Sewer, Steubenville, Ohio.......	4- 8
4-12	Sewers, Long Island City, N. Y..	4- 8
4-12	Disposal plant, College Hill, Ohio	3-25
4-12	Sewers, New York..............	4- 1
4-12*	Sewer pipe, Ridgway, Pa.......	4- 1
4-13	Diverting conduit, Sioux City, Iowa	3-25
4-13	Sewerage system, Saskatoon, Sask.	4- 1
4-13	Sewer, Clinton, Iowa..........	4- 8
4-13	Sewers, Youngstown, Ohio.......	4- 8
4-13	Sewers, Cleveland, Ohio........	4- 8
4-14	Sewers, Guthrie, Okla..........	4- 8
4-14	Sewers, Upper Sandusky, Ohio..	4- 8
4-14	Sewer, Greenville, N. C.........	4- 8
4-15	Sewer, La Crosse, Wis..........	4- 1
4-15	Sewers, Carlstadt, N. J.........	4- 1
4-15	Disposal plant, Circleville, Ohio.	3-25
4-15*	Sewers, McAlester, Okla.	3-25
4-15	Sewer system, Alliance, Neb....	4- 8
4-15	Sewer system, Wayne, Neb......	4- 8
4-16	Sewer, Waukegan, Ill..........	4- 8
4-16*	Sewer, Louisville, Ky..........	4- 8
4-17	Sewers, Oshkosh, Wis..........	3-25
4-19*	Sewers, Erie, Pa...............	4- 8
4-19	Sewer, Milburn, N. J.	4- 8
4-20*	Sewers, Auburn, N. Y..........	3-25
4-21*	Sewer mains, Birmingham, Ala.	3-25
4-21	Sewer pipe drain, Columbus, O..	4- 1
4-26	Sewers, Washington, D. C......	4- 1

STREETS AND ROADS.

4- 9	Road impvts., Napoleon, Ohio....	4- 1
4- 9	Roads, Noblesville, Ind..........	3-25
4- 9	Road repair, Toledo, Ohio.......	3-25
4-10	Grading, etc., Cleveland, Ohio...	3-25
4-10	Grading, Washington, D. C......	4- 1
4-12	Road, Boydtown, Va............	4- 1
4-12	Sidewalk, etc., New York........	4- 1
4-12*	Macadam, Decatur, Ala.........	3-18
4-12	Paving, Stockton, Cal..........	4- 8
4-12	Road, Portsmouth, Va..........	4- 8
4-12*	Paving, Oil City, Pa...........	4- 8
4-12*	Repairing walks, Fort Wood, N.Y.	4- 8
4-13	Concrete walks, Painesville, O...	4- 8
4-13	Macadam, Trenton, N. J........	4- 1
4-14	Road, Freehold, N. J...........	4- 1
4-14	Paving, Shamokin, Pa...........	3-25
4-15	Pavement, Albert Lea, Minn.....	4- 1
4-15	Regulating, etc., Brooklyn N. Y.	4- 1
4-15	Road oil, Brooklyn, N. Y........	4- 1
4-15	Grading, etc., Byesville, Ohio....	4- 1
4-15	Asphalt repair, New York.......	4- 8
4-16*	Pavement, Tomah, Wis.........	4- 8
4-17	Grading, etc., Cleveland, Ohio..	3-25
4-17	Paving, La Crosse, Wis.........	4- 1
4-19	Pavement, Fulton, N. Y.........	3-25
4-19	Paving, Montgomery, Ala.......	4- 8
4-20	Sidewalks, Mount Healthy, O....	4- 8
4-20*	Stone crushers, etc. Saskatoon, Sask.....................	4- 1
4-21	Regulating, etc., Brooklyn, N. Y.	4- 8
4-21	Curb and gutter, Roanoke, Va...	4- 8
4-27	Street impvt., St. Bernard, Ohio.	4- 8
4-28	Roads, Anderson, Ind..........	4- 8
5- 3	Road, Hartford City, Ind.......	4- 1

MISCELLANEOUS.

4- 8	Cement, Worcester, Mass.	4- 8
4-10	Wharf, Norfolk, Va.	4- 8
4-10	Ditch, Frankfort, Ind..........	4- 1
4-10*	Cement, Sacramento, Cal........	4- 1
4-10	Buoy service, Mobile, Ala.......	3-18
4-12*	Lock gates, etc., Wash, D. C....	3-18
4-12	Cement, pipe, etc., Quebec, Que..	4- 8
4-12*	Air compressor, East Orange, N.J.	4- 8
4-13	Oak piles, New York	4- 8
4-13	Steel rails, Trans-Continental Ry.	4- 8
4-14	Dredging, Brooklyn, N. Y......	4- 8
4-14	Machine parts (garbage), New York	4- 8
4-14*	Pier repair, Manistee, Mich......	3-18
4-14*	Fence, Hull, Mass..............	3- 4
4-15*	Breakwater, Buffalo, N. Y.......	3-18
4-15*	Automatic anchors, Ft. Totten, N. Y	3-25
4-15*	Creek impvt., McAlester, Okla..	3-25
4-15	Maintaining buoys, Detroit, Mich.	4- 8
4-15	Tunnel, Chattanooga, Tenn.....	4- 8
4-15	Phone supplies, New York	4- 8
4-15	Gravel, timber, New York.......	4- 8
4-15	Garbage removal, Carnegie, Pa.	4- 8
4-15	'Phone system, Belle Plaine, Sask.	4- 1
4-15	Pier shed, Elizabeth, N. J......	4- 1
4-16	Fire-alarm system, New York..	4- 8
4-16	Ditch, Mantorville, Minn.	4- 8
4-16	Land sprinkling (garbage), New York	4- 8
4-16	Cement, Brandon, Man	3-18
4-16	Mech. equipment, New York.....	4- 1
4-16*	Crematory (Garbage), West Point, N. Y.	4- 1
4-16	Castings, Springfield, Mass.....	4- 8
4-17*	Tile ditches, Atkinson, Ill.......	4- 1
4-17	Memorial, Gettysburg, Pa.......	3-25
4-17*	Lumber, Nashville, Tenn........	3-18
4-19*	Lock gates, Nashville, Tenn.....	3-18
4-19*	Wire fence, Fort Meade, S. Dak.	3-25
4-19	Supplies, Panama..(U. S. Poss.)	4- 8
4-19	Carts (garbage), New York.....	4- 8
4-20	Cement, New York	4- 8
4-20*	Dam, Detroit, Mich...........	4- 8
4-20	Dam, Sault Ste. Marie, Mich..	4- 1
4-22*	Hose, packing, Panama (U. S. Poss.)	4- 1
4-23*	Cement, Wheeling, W. Va.	4- 8
4-23*	Removing wreck, New York.....	3-25
4-23*	Lock, Cincinnati, Ohio	3-25
4-26*	Pass, Wheeling, W. Va.........	4- 1
4-30	Cable, Toronto, Ont.	4- 8
4-30*	Bronze railings, Wash., D. C....	4- 8
5- 1	Fencing, etc., Lynchburgh, Tex.	4- 8
5- 1	Concrete walls, Louisville, Ky..	4- 8
5- 1*	Concrete walls, Louisville, Ky..	4- 8
5- 1*	Road machinery, Hawaii (U. S. Poss.)	3-25
5- 3*	Concrete wall, Charleston, S. C..	4- 1
5- 5*	Dredging, New London, Conn....	4- 8
5- 6*	Removing wreck, New York....	4- 8
5- 8*	Dipper dredge, Nashville, Tenn..	4- 8
5- 8	Seawall & dredging, Norfolk, Va.	4- 8
5- 8	Seawall, dredging, Norfolk, Va..	4- 8
5-14*	Cement, Hawaii (U. S. Poss.)....	4- 1
5-22	Dry dock, Hawaii (U. S. Poss.).	3-25
5-26*	Lock, Vicksburg, Miss..........	4- 1

EXAMINATIONS.

4-12	Lab. Asst., New York..........	4- 8
4-14	Mech. Dftsman, Panama........	3-25
4-14	Top. Dftsman, Panama..........	3-25
4-21	Tracer, Panama	3-25
4-21	Asst. Elec. Engr., Wash, D. C..	3-25
4-21	Asst. Chemist, Wash., D. C.	3-25
4-21	Asst. Physicist, Wash., D. C....	3-25
4-21	Asst. Photographer, Wash., D. C.	3-25

FOREIGN.

4-15	Steel rails, Siam	2-25
4-15*	Motor hose wagon, China.......	2-25
4-24	Railway supplies, Chile	2-25

RAILWAYS.

(* *denotes that this work is advertised in Engineering News.*)

AUGUSTA SOUTHERN.—Terry Respess, Engr.-in-Charge, Augusta, Ga., has surveyed the line from Hephzibah to Blythe and Augusta. Company proposes to straighten its railroad between these points and between Blythe and Gibson.

BALTIMORE & OHIO.—This company is reported to have under consideration the purchase of equipment to cost about $10,000,000. Tentative plans have been prepared which call for 6,000 to 10,000 steel freight cars of various types and a large number of heavy locomotives.

CAIRO & NORFOLK.—W. B. Hooker, Engr., Roanoke, Va., will run survey for the C. & N. R. R. between Cairo, Ill., and Bowling Green, Ky. As noted last week, construction probably will be resumed in April or May at the Mississippi River end of this railway. It is hoped to have the first two sections (a total of about 60 miles) completed in October or November, and the third section to Hopkinsville, Ky., by January, 1910. L. W. Goode, 111 Broadway, New York, is Pres.

CHICAGO, MILWAUKEE & PUGET SOUND.—H. C. HENRY, of Seattle, has been awarded the contract for building a branch line in Idaho, which is to be the first of a number of important feeders to the main line of the Chicago, Milwaukee & Puget Sound Ry. The contract calls for the completion of 80 miles of road starting from St. Maries, and by way of Clarkia and Boville to the Potlatch, where a connection will be made with the Washington, Idaho & Montana branch. The line will pass through a well-timbered country which will give the Potlatch Lumber Co. all outlet.

The competition of the Pacific Coast extension of the Chicago, Milwaukee & St. Paul Ry., now known as the Chicago, Milwaukee & Puget Sound Ry., creates a world's record for rapidity of railway construction, according to the Boston "Transcript." The length of the extension from the Missouri River to Seattle and Tacoma is a trifle over 1,400 miles. "The first shovelful of earth was turned April 15, 1906. Since then 60,000,000 cu. yds. of material has been excavated, 360,000 yds. of tunnel driven, 20 miles of bridges erected and 200,000 tons of 85-lb. rails laid, at a total cost of $85,000,000. There was no celebration of any kind, and the completion of the sixth transcontinental railroad was simply a part of the day's work. Ballasting will be completed about June 1. Freight and passenger service will be established soon afterward."

CUMBERLAND NORTHERN. — Company may commence construction late this summer. Preliminary surveys are now under way between Artemus and Beattyville, Ky., 75 miles. J. H. Graham, of Knoxville, Tenn., is Pres.; S. P. Condon is Vice-Pres., and E. L. Thomas is Secy. and Treas., Knoxville. Noted on March 18.

DULUTH, WINNIPEG & PACIFIC.—Incorporated in Minnesota with $100,000 capital stock to build from Virginia, Minn., south to Duluth, connecting the Duluth, Rainy Lake & Winnipeg Ry., which is controlled by the Canadian Northern, with Duluth. The directors include W. H. Cook, Pres., Duluth; J. L. Washburn, W. B. Bailey, L. I. Feetham and J. F. Walsh. Work will be started this spring. It is planned to build docks and terminals in Duluth.

GRAND TRUNK PACIFIC.—This company has asked the Dominion Government for a loan of $10,000,000. In explanation of the request, William Wainwright, Second Vice-Pres., says: "It is merely a request that the government will act as bankers for the company to the extent of $10,000,000. A better roadbed is being constructed than was at first thought necessary. The grade from Moncton to the Rocky Mountains will not be more than 4-10 of 1%, or 21 ft. to the mile. The curvatures have also been reduced and the line built as permanent work throughout. Another reason is that wages were very high, labor was scarce and materials of all kinds that went into the road were very dear, and in addition the Government placed a duty on steel rails. The cost of the Grand Trunk Pacific line has run up for the reasons named to $32,000 per mile, and while the Grand Trunk Pacific Co. must provide the money, it is willing to do so and asks no favor from the Government beyond this assistance of its credit in order to avoid putting out bonds now and making a heavy loss. Owing to the extension of the prairie section 130 miles further west than was contemplated, and for the other reasons mentioned by Mr. Wainwright, the cost of the prairie section was then estimated by the company's engineer at $32,198,351 and by the Government's engineer at $33,007,449, or $36,034 a mile.

GULF LINE RY.—An extension will be made from Bridgeboro to Camilla, Ga., 20 miles. Survey is being made which may be continued farther south, about 30 miles. Details for construction are not yet settled. G. F. Alford is Pres., Sylvester, Ga.

JACKSON BELT LINE.—Application for a charter for this company has been made in Mississippi. The promoters of this enterprise are Messrs. R. L. Bradley, of Jackson, Miss.; Patrick Henry, of Vicksburg, Miss.; and L. P. Cheatham, of Birmingham, Ala. Construction will begin at Asylum Switch, north of town, and the line will end in Duttos, south of town, tapping every line of railroad entering Jackson. From Asylum Switch the route will be west through Sligo, a tract of land owned by the company, and there the switching will be done. The belt line will cross Capitol St. about Cedarlawn Cemetery, or at Valley St., thence south to Duttos.

KINGFISHER, COLORADO & GULF.—This company proposes to build from Oklahoma City northwest to a point in New Mexico. Surveys have been made, it is reported, and grading work is to be begun within 60 days. J. M. McDonald, Pres., New York; W. W. Bonser, Treas.; and J. M. Cunningham, Secy.

MISSISSIPPI RIVER & WESTERN.—Permanent survey is being made by this company from Natchez to Meridian, Miss., 190 miles, via McNair, Hazlehurst, Georgetown, Mendenhall and Stephens. Cyrus Plummer, of Crystal Springs, Miss., is Engr.-in-Charge. J. W. Hudson is Vice-Pres., Hazlehurst, Miss. Chas. F. Scofield is Secy., 35 Wall St., New York.

MISSOURI, KANSAS & TEXAS TERMINAL CO. OF ST. LOUIS.—This company has been incorporated to build extensive yards and other terminals for the Missouri, Kansas & Texas Ry. in Missouri. Capital, $100,000. S. B. Fisher is Ch. Engr. at St. Louis. The incorporators are A. A. Allen, Gen. Mgr., and other officers of that railroad.

MONTANA, WYOMING & SOUTHERN.—Construction probably will begin soon on the 163 miles from Sheridan, Wyo., northeast to Miles City, Mont. Contracts will be let at once. The work will include six steel bridges. T. J. Robb is Ch. Engr., Sheridan. As noted on Nov. 5, 1908, the city of Sheridan has subscribed $10,000 toward this new railway. Company has been granted a charter in Wyoming, with $5,000,000 capital, to build from Sheridan, Wyo., north to Miles City, Mont., 125 miles. An extension may eventually be built from the proposed southern terminus at Sheridan, south to the Colorado & Southern at Orin Junction, Wyo., 180 miles. R. H. Walsh, Pres. of the First National Bank, Sheridan, is Pres.

OKLAHOMA, VERNON & TEXAS.—Incorporated in Texas to build a railroad line from Vernon, Tex., westerly through the counties of Wilbarger, Foard, Cottle, King and Dickens to a point in Crosby County, about 125 miles. Preliminary surveys are being made. L. G. Hawkins is Pres., and A. J. Robinson, Ch. Engr., Vernon.

SAN DIEGO, EL PASO & ST. LOUIS.—Application will be made for a charter in New Mexico, with a capital of $4,000,000, to cover about 200 miles to cross that territory. Surveys are now being made locating this part of the line. Right-of-way and sites for terminals have been secured for almost the entire line. There will be bridges at Pecos, Yellowhouse and Peace Rivers. L. P. Atwood is Ch. Engr., El Paso. This company was organized to build a line from El Paso, Tex., northeast through the southeastern corner of New Mexico, and through Texas to the Texas-Oklahoma boundary on the Red River, about 500 miles. The company has been granted a charter in Texas, with a capital of $100,000, to build the first 100 miles northeast from El Paso to the New Mexico line. A. Courchesne is Pres. and H. B. Stevens is Vice-Pres., El Paso, Tex.

TEXAS.—The Industrial Club, of Fairfield, Tex., has been organized and a resolution has been adopted offering, on behalf of Freestone County, a bonus of $1,000 per mile, right-of-way, etc., for a railroad to Fairfield. R. M. Compton is Secy.

The citizens of Mason, Tex., have plans under consideration for the building of a railroad to the town of Mason. At a recent meeting resolutions were unanimously alopted providing for the appointment of a permanent committee with full power to solicit and collect subscriptions and to contract with any parties in regard to building a railway. This committee is composed of Charles Bierschwale, Wm. Hofmann, J. W. White, Max Martin and E. J. Lemburg, who are directed to add one person from each commissioner's precinct to this committee.

TRANS-CONTINENTAL.—Bids are asked by the Commissioners of the Trans-Continental Ry., Ottawa, Ont., until noon, April 13, for 5.154 gross tons of 80-lb. steel rails (open hearth or Bessemer, at the option of the Commissioners), and the necessary fastenings, in strict accordance with the specifications of the Commissioners, for delivery at West Fort William by June 15, 1909. P. E. Ryan, Secy.

VALDOSTA, MOULTRIE & NORTHWESTERN.—Contract for building this line from Valdosta, Ga., northwest to Moultrie, 38 miles, has been awarded to J. W. WRIGHT, JR., of Union Springs, Ala.

VIRGINIAN RY.—Stockholders have ratified contract with the TIDEWATER CONSTRUCTION CO., of Norfolk, for building the Winding Gulf branch of the Virginian system, extending from the main line to Rogers' coal properties in Wyoming and Raleigh Counties, West Virginia. The branch will be 23 miles long and will cost $1,500,000. Gold bonds for this amount will be issued.

WEST VIRGINIA.—The Chaffey-Wilson Lumber Co. has been incorporated with Richard Chaffey, Pres., Merritt Wilson, Vice-Pres. and Mgr., and Geo. W. Wilson, Secy. and Treas., all of Elkins, W. Va. Company will develop 17,248 acres of timber land recently purchased from John T. McGraw, Grafton, W. Va., and others, and will construct railway and build sawmill with daily output of 100,000 ft. of lumber.

ELECTRIC RAILWAYS.

LONG ISLAND CITY, N. Y.—The New York & North Shore Traction Co. (Long Island Elec. Ry. Co., successor), which recently obtained a franchise for the extension of its lines from Roslyn to the north shore, has also been granted a franchise by the Board of Estimate and Apportionment for the extension of its system to the eastern boundary of Flushing. Heretofore this company operated wholly in Nassau County, but with the completion of the proposed lines a complete service will be established between the north and south shores of Long Island. Counsel for the New York & North Shore Traction Co. states that the work on the projected line will be begun in time to have cars in operation when the Queensboro Bridge is officially opened on June 12. W. O. Wood is Gen. Mgr., 7 Borden Ave., Long Island City.

WAYNESBURG, PA.—The Waynesburg & Monongahela Ry. Co. has organized and elected the following officers: Peter Langsdorf, McKeesport, Pres.; Charles Koehler, McKeesport, Treas.; J. Carson Sheldon, Buffalo, N. Y., Secy.; W. J. Sheldon, Waynesburg, Vice-Pres. and Gen. Mgr. The Board of Directors will consist of these officers and James F. Woodward and David Hardy, both of McKeesport. W. J. Coursin, House Bldg., Pittsburg, has been chosen Ch. Engr., and W. Edgar Reed, of the Carnegie Technical Schools, Pittsburg, Consult. Engr. As noted on Jan. 14, "this line, when completed, will be about 95 miles in length, and it will extend through Waynesburg, Washington, Jefferson, Clarksville, Mariana, Millsboro, Fredertckstown, Mount Morris, Carmichaels, Rices Landing, Greensboro and South Brownsville. The power plant will be built at Waynesburg, and the repair shops at East Waynesburg. A subsidiary company will be organized for furnishing power for lighting and heating. Headquarters, People's National Bank Bldg., Waynesburg. Capital stock authorized. $84,000, to be increased to $3,000,000; issued, $28,000. Company plans to purchase and operate the Sabraton Railway, which operates a line between Morgantown and Sabraton, three miles; to take over and construct the Uniontown, Brownsville & West Side Railway, now being built from Bridgeport through Brownsville and Uniontown, and also the Brownsville, Masontown & Smithfield Street Railway, Masontown, Pa."

NEW CASTLE, PA.—Surveys are under way between Butler, Pa., and Conneaut Lake for the New Castle and New Wilmington Elec. Ry. Co.'s proposed line. A. G. Shaw is Ch. Engr. About twelve miles between New Wilmington and Big Bend is the only section of the route that has not been surveyed. It is announced that the Mercer Construction Co., Mercer, Pa., has purchased the charter of this company, including the franchise in New Castle, Pa., and eleven miles of right-of-way between New Castle and New Wilmington. The line is projected north to Conneaut Lake via Greenville. The main line will be 44 miles long. F. F. Filer, is Pres., Mercer; S. D. Downs, Vice-Pres., Greenville; L. W. Orr, Secy. and Treas., Mercer.

PITTSBURG, PA.—Following the organization of the new City Councils on April 5 there will be presented a new ordinance by the Pittsburg Subway Co. providing for the construction of an underground electric railway system to cost about $15,000,000. A. O. Fording, Commonwealth Bldg., Pittsburg, is counsel for the company. Plans for building the subway have been agreed on by the company, which will present to councils a new ordinance identical with one which was introduced in Select Council last December by F. J. Torrance. Previously noted.

WHEELING, W. VA.—Application has been made to charter the Rapid Transit Tunnel & Railway Co. to build an electric line between Wheeling and Pittsburg. The incorporators are Albert M. Schenk, E. W. Stifel, D. L. Merriman and Ambrose S. List, of Wheeling; and J. R. Kommer, of Pittsburg.

LAURENS, S. C.—The Laurens Chamber of Commerce has appointed Robt. A. Cooper, W. R. Richey, Sr., A. C. Todd and others as a committee on plans to build an electric railway from Laurens to Clinton, on the Seaboard Air Line.

DECATUR, ALA.—We are officially informed that company has not been incorporated yet to build an electric road from Decatur to Russellville, in Franklin County, via Moulton, the county seat of Lawrence County, about 54 miles. Preliminary survey has been made and right-of-way partly obtained. No contracts have been awarded, but it is planned to have the enterprise in business shape within 30 or 60 days. The promoters are W. H. Norris of Russellville, and others. Previously noted.

HAMMOND, IND.—The Calumet Traction Co. has been incorporated in Indiana for the purpose of building an electric railway from Hammond to East Chicago, North Calumet and Center. Headquarters, Hammond. Capital stock, $100,000. Directors: Walter J. Riley, East Chicago; Wm. P. Ijams, Terre Haute; E. L. Keating, Boston; Patrick Harrahan and Edward Bailey, Chicago.

GRAND RAPIDS, MICH.—We are officially advised that contract will be let soon for the construction of the southeastern division of the Grand Rapids Elec, Ry. This section of the railway will extend from Kalamazoo to Battle Creek, Burlington, Coldwater and Camden, across the State line and into Ohio. Another branch of the system will be built from Grand Rapids to Greenville, Edmore and Mount Pleasant. It will be about 150 miles in length. Surveys are made and capital and right-of-way secured. J. W. Boynton is Pres., and C. M. Rich, Ch. Engr., Grand Rapids. Previously noted.

FLORENCE, MICH.—The Western Shore Electric Ry. Co., which was recently incorporated to build an electric railway from Florence to Blair, has applied to the Florence City Council for a 50-year franchise to operate a street railway over certain streets which will connect the two cities. L. M. Allen, L. C. Nebergall, Don C. Gould, J. F. Munro and T. J. McVittie, of Omaha, are the incorporators. Officers and directors are yet to be elected. Capital, $150,000.

BOZEMAN, MONT.—The Gallatin Valley Elec. Ry. Co. has placed a contract with WESTINGHOUSE, CHURCH, KERR & CO., of New York, for the construction of its proposed electric railway. It is to extend from Bozeman to Ferris, Hot Springs and Salesville, about 16 miles. H. S. Buel is Pres.; Charles B. Anderson, Secy.; George Cox, Treas.

KANSAS CITY, MO.—George Townsend, 1327 Commerce Bldg., Kansas City, Mo., and associates may build a double-track railroad from Kansas City to St. Joseph, Mo., 52½ miles, one track being for electric cars and the other for steam. C. F. Enright, of St. Joseph, Mo., is reported interested.

ROGERS, ARK.—The Rogers, Pea Ridge & Northern Interurban Railway Co proposes to build about 20 miles of electric railway. W. T. Patterson, of Pea Ridge, is Engr. He is also a Vice-President of the line. The others are A. R. Potter, Pres.; J. F. Walker, Vice-Pres.; J. J. Putnam, Treas., and Bryan Snyder, Secy., Rogers, Ark.

GAINESVILLE, TEX.—J. T. Edwards, William McKenzie, R. R. Bell and S. M. King have been appointed by the Commercial Club to complete arrangements with capitalists for the proposed street railway.

OKLAHOMA CITY, OKLA.—The Oklahoma Interurban Traction Co., which proposes to construct an electric railway from Oklahoma City through Capitol Hill to El Reno, has applied to the City Council for a franchise to build its lines along certain streets in this city. L. E. Patterson is the local representative of the company.

NOWATA, OKLA.—William V. Thraves, of Nowata, is promoting a street railway from Nowata to Coffeyville.

ROSEBURG, ORE.—Application has been made to the City Council of Roseburg, by J. L. and S. A. Kendall, owners of the local water and light systems in Roseburg, for a franchise to build a street railway in Roseburg.

MIDLAND, ONT.—The Simcoe Elec. Ry. & Power Co. probably will commence construction this year on its proposed electric railway which is to connect Penetanguishene, Midland, Victoria Harbor, Waubaushene and Coldwater. The company may build a power plant at Big Chutes, on the Swern River. It is the intention to furnish power for lighting purposes. Capital stock authorized, $500,000. Bonds authorized, $400,000. Provisional directors are Jas. Playfair, Douglas L. White, W. Finlayson, of Midland; W. J. Sheppard, of Waubaushene, and W. J. Lovering, of Toronto.

LIGHT AND POWER PLANTS.

(*denotes *that this work is advertised in Engineering News*)

KENNEBUNK, ME.—The citizens have voted to install an auxiliary steam plant in the municipal electric light station, for which $7,000 has been appropriated. It was voted to extend the electric light system up through Alewive at a cost of $2,500 also. A committee, consisting of Frank W. Bonser, Edwin I. Littlefield and Philbert Raino, has been appointed to have charge of the electric light department.

SYRACUSE, N. Y.—The Syracuse Lighting Co. has made application to the Public Service Commission for permission to issue $2,500,000 in bonds, of which $207,000 is to be used for extensions to its distributing system and other improvements to its plant, and $2,293,000 to be held for future construction and improvements. J. C. De Long, Syracuse, is Gen. Mgr.

OSWEGO, N. Y.—The Oswego County Light & Power Co. has petitioned the Public Service Commission at Albany, for authority to increase its capital stock of $1,000,000 to $1,100,000. The company proposes to issue the stock at this time for the development of a plant and transmission line at Salmon River Falls. The company also asks consent to issue $2,500,000 in bonds. The reservoir to be formed from the construction of the dam at the falls will extend easterly to Redfield, covering more than 7,000 acres. The company's incorporation authorizes it to operate in the counties of Oswego, Onondaga, Monroe, 'Oneida, Cayuga, Seneca, Wayne and Jefferson. At Salmon River Falls there is a direct fall of more than 1,100 ft. The river then flows with heavy grade through a deep narrow gorge, emerging two miles below. The company's engineers estimate that 15,000 HP. can be developed at an expenditure of $3,100,000 and that the plant when completed will have a value of $4,000,000, capable of earning at least 6% on such valuation. As Syracuse is within 35 miles of the falls, it is expected that the power developed will be utilized to operate interurban trolley lines leading out of that city, as well as for light, heat and power purposes. Watertown, Oswego, Rome and Oneida would also be supplied with power.

NICHOLVILLE, N. Y.—The electric light plant of the Nicholville Electric Lighting Co. was destroyed by fire March 16, causing a loss of about $10,000. The plant was located on the east branch of the St. Regis River. The company supplied electricity in the villages of Nicholville, Fort Jackson, Hopkinton, Moira and North Lawrence, and was making arrangements to extend the transmission lines to Brushton. It is stated that the company will rebuild the plant at once and expects to have the system in operation again within four months. R. S. Chambers is Owner.

NEW YORK, N. Y.—Bids are asked until 11 a. m., April 19, by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for installing electric equipment in additions to and alterations in Public School No. 87, on west side of Dry Harbor Road (Washington Ave.), between Pulaski and Wayne (Lafayette) Sts., Middle Village, Boro. of Queens.

STEELTON, PA.—The Steelton Light, Heat & Power Co. will enlarge and increase the output of its plant. Steam engines direct connected to alternating-current, three-phase generators, will be installed. The company will retain the electrical service from the York Haven Power Co.'s hydro-electric plant on the Susquehanna River, at York Haven. Fred E. Keeney is Supt.

KECKSBURG (Mount Pleasant post-office), PA.—J. M. Keck, of Kecksburg, will build an electric lighting plant here this summer, using water power from a dam he built last summer to operate the light plant. He will furnish electric light and power for city, private house and business building lighting, as well as for manufacturing plants here and in surrounding towns.

ALTOONA, PA.—The directors of the Edison Electric Illuminating Co. has decided to enlarge and remodel its plant and to extend its electrical service. Contracts for equipment, which will include dynamos, electrical apparatus, etc., boilers and engines, will be let at once. The cost of the work is estimated at $250,000. E. B. Green, Altoona, is Supt.

*WASHINGTON, D. C.—Bids are asked until 3 p. m., April 30, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for bronze railings and lamp standards for the East Front of the Treasury Building, Washington, D. C.

BUENA VISTA, VA.—The Rockbridge Power Co. has awarded the contract for the entire equipment of machinery for the new power plant at Goose Neck dam, four miles below Buena Vista, to the GENERAL [illegible]TRIC CO., of Schenectady, N. Y.

ACCOMAC, VA.—We are officially advised that A. J. Lilliston, of Accomac, contemplates installing an electric light plant in connection with his sawmill. He has a 35-HP. engine and 40-HP. boiler. He desires to communicate with dealers. Fred E. Reudiger is Engr.

BURLINGTON, N. C.—The Board of City Aldermen, in special session, granted a franchise to the Southern Power & Traction Co. to enter the city with its lines and furnish power to plants using 20 HP. or more. The Southern Power & Traction Co. will build a dam across Haw River, from which it is estimated 14,000 HP. will be derived, and has secured franchises in entering Burlington, Graham, Reidsville, Wentsworth and other places with its lines.

BIRMINGHAM, ALA.—Preparations are being made by the Aldrich Power Co. to erect its transmission lines in Birmingham. The company is constructing its line from the power plant at North Birmingham to the city limits. It is stated that a site has been purchased on Village Creek, where a plant will be erected at a cost of $500,000.

NEWTON, MISS.—Xavier A. Kramer, of Magnolia, Miss., advises us that he is preparing plans and specifications for a 75-KW. municipal lighting plant for Newton, Miss.

CANTON, OHIO.—See item under Manufacturing Plants.

ALLIANCE, OHIO.—The [illegible]wer & Illuminating Co., of this city, has been incorporated with a capital stock of $75,000, and has taken over the holdings of the Sebring Light Co., which owns and operates an electric power plant at [illegible]t Point, Columbiana County, Ohio. The incorporators of the company are Grant S[illegible]r., J. H. Forbush and A. S. Kirkbridge, of Salem, Ohio, J. L. Richert, of Leetonia, Ohio, and H. H. Hasford, of Fort Wayne, Ind. The general offices will be located here. The company will make changes and improvements at the plant, and will supply electric power to the Youngstown & Ohio River Electric Ry. Co., the Star Electric Co. and other electric lines in this state. The capacity of the plant will be increased during the summer.

HARTWELL (Cincinnati post-office), OHIO.—Bids are asked by the Board of Public Service of the City of Cincinnati, until noon, April 16, for the erection and completion of additional steam and electrical equipment for the power plant to be constructed for the City Infirmary, Hartwell. Harry Hake, Andrews Bldg., Cincinnati, is Arch.; John J. Wenner is Clk. Bd.

CANAL DOVER, OHIO.—The STRUTHERS-WELLS CO., of Warren, Pa., has been awarded the contract for the construction of the municipal electric light plant at $34,700.

INDIANAPOLIS, IND.—The Indianapolis Light & Heat Co. has awarded a contract to the GENERAL ELECTRIC CO., of Schenectady, N. Y., for an 8,000-HP steam turbine, direct connected to a 5,000-KW. generator, to be installed in the Mill St. station in Indianapolis.

COLUMBUS, IND.—The Central Indiana Light Co. has awarded a contract to the WESTINGHOUSE-CHURCH-KERR CO., 10 Bridge St., New York, for the construction and equipment of a new power plant. The plant will furnish electricity for the street railway system and also for lamps in this city.

INDIANAPOLIS, IND.—The Board of Park Commissioners has approved the plans of the Indianapolis Light & Heat Co. for the dam which the company is to build in Fall Creek east of Northwestern Ave. Engineers have already completed the plans of the dam and have passed blue prints to the board for approval. The dam will form a lake in the stream running back as far as Capitol Ave. The lake will be used as a reservoir from which the company will draw water for its station on Mill St. N. E. Boggs is Ch. Engr.

CLERMONT, IND.—Emma Lee Elam, Pres. Indiana Girls' School, Clermont, advises us that money has been appropriated for the following, repairs to the steam heating plant with one new boiler; electric lighting for the campus. The specifications have not been prepared. R. L. Sackett, Purdue University, Lafayette, Ind., is Engr.

GRAND RAPIDS, MICH.—The Grand Rapids-Muskegon Power Co. is contemplating the installation of a steam auxiliary plant. The plant will be built as an addition to the present power-house on the west side, but will be large enough to contain equipment capable of generating from 25,000 to 30,000 HP.

STURGIS, MICH.—A. L. Hibbard, City Clk., informs us that permission has been granted the City of Sturgis by the County Board of Supervisors to construct an 18-ft. dam with a 22-ft. head at the power-house on the St. Joseph River, 18 miles distant. A hydro-electric plant of 2,000 HP. will be developed with transmission line to this city. Contracts for engineering and superintendence of construction will be placed soon by the City Council.

VILLISCA, IOWA.—The Villisca Light, Power & Fuel Co. has awarded a contract to the CONDON CONSTRUCTION CO., of Chicago, Ill., for a general overhauling of its power station and distributing system. An additional steam engine will be installed to take care of the day load, and the distribution system will be made one frequency instead of two as at present.

MARION, KAN.—Plans are being prepared by Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., for a municipal electric light plant and water-works system at Marion, the cost of which is estimated at $50,000.

SAN ANTONIO, TEX.—The San Antonio Traction Co. and the San Antonio Gas & Electric Light Co., owned by the same people, are planning to erect a power-house, it is stated. It will cost $125,000 and will supply the power needed for both companies. The new power-house is to be built on a spur of the San Antonio & Aransas Pass R. R., near the Conception Road.

BEAUMONT, TEX.—Plans and specifications are now being prepared for a plant for the Beaumont Gas Co. The plant is to have a maximum capacity of 600,000 ft. per day. The buildings and equipment, etc., in connection with the plant may involve the expenditure of $100,000 or more. It is the purpose of the company as soon as possible to purchase an entire block of ground to be located in the south end as the site for the new plant and for locating its plant and tanks. M. T. Walker is Mgr.

AMARILLO, TEX.—We are advised by G. B. Findley, Engr., Machesney Bldg., Pittsburg, Pa., that the Amarillo Water, Light & Power Co. of Amarillo, is about to install a 400-HP. gas producer and gas engine outfit. Propositions will be submitted to Mr. Findley at Pittsburg.

HYDRO, OKLA.—Burns & McDonnell, Consult. Engrs., Scarritt Bldg., Kansas City, Mo., are preparing plans for an electric light plant and water-works system at Hydro, to cost about $25,000.

ORIENT, WASH.—It is stated that C. H. Patten, A. R. Luncheford and associates, of Spokane, Wash., will commence work soon on the construction of a dam and power plant on Boulder Creek, near where it empties into Kettle River, where it is claimed that 2,500 HP. can be developed with a normal flow of water. The cost of the dam and power plant is estimated at $200,000. The plant will furnish electricity to Orient and towns and mines in this vicinity.

TACOMA, WASH.—Frank L. Davis, City Engr., advises us that the city will build a 20,000-HP. power plant on Nesqually Canon, to cost $2,000,000. Surveys are being made preparatory to condemnation proceedings. Bonds have been voted, but it probably will be a year before contracts will be let. The static head at power house is 430 ft. There will be 35 miles of transmission line.

WASHOUGAL, WASH.—A dam will be built on the Washougal River by Cottrell & Son, which will furnish 1,000 HP. for the generation of electricity for use in Camas and Washougal. The dam will be located on John Krohns' property, 2½ miles from Washougal. The poles on which the wires will be strung for the conveyance of the electricity are now being erected. Cottrell & Son have the franchise for putting in an electric system in both Camas and Washougal.

YREKA, CAL.—The Siskiyou Electric Power & Light Co. has recorded in the county recorder's office claims to 450,000 ins., measured under a 4-in. pressure, of the waters of the Klamath River, to be taken at two points about half a mile distant from the present power plant on Fall Creek. Alex. J. Rosborough, Secy. of the company, is claimant and locator. Jesse W. Churchill is Pres. and Mgr. of the company. Joseph J. Rosborough, of Oakland, is associated in the enterprise. The water location carries the entire flow of the river at low water. The company claims the right to use the water for household, stock, manufacturing, irrigating, agricultural and mining purposes and for the purpose of developing electric power and power for all purposes. The company this spring will begin work on a power plant on the Klamath River, which is to be completed in three years or less, and made capable of developing 60,000 HP. The plant will be located at Ward's Canyon, sometimes known as Box Canyon, where the company owns both sides of the river for two miles. The tunnel will begin above the canyon and pass through the mountain at the bend of the river.

MANHATTAN, NEV.—Contract for construction of a power transmission line to Round Mountain and Manhattan is reported to have been let to HILL & CARPENTER, at $11,000. The line as surveyed will pass over the saddle between Round Mountain and Stebbins Hill and go up Main St., the poles being set on the east side of that thoroughfare.

PROVO, UTAH.—Two estimates for the construction of electric power plants have been submitted by the Mayor to the City Council, both prepared by L. L. Nunn, of the Telluride Power Co. One plan is for a plant to be located at the north fork in Provo Canon, with an output of 1,600 HP., to cost $102,000; the other to be located at the mouth of the canon, at a cost of $117,000, with an output of 1,400 HP.

TORONTO, ONT.—Bids are asked until April 30 by Joseph Oliver, Mayor and Chn. Bd. of Control, City Hall, Toronto, Ont., for underground cable. Noted on March 18.

TORONTO, ONT.—Plans and specifications have been completed by K. L. Aitken, Engr.-in-Charge of the municipal distributing plant, for copper cables, which have been approved by Alexander Dow, Consult. Engr., Detroit, Mich. It is estimated that the cables will cost between $40,000 and $50,000.

WINNIPEG, MAN.—Bids are asked until April 13, by Lamport & Ferguson, Canada Life Bldg., Toronto, Ont., for the supply of forms, material and labor involved in the construction and placing of concrete footings required for the steel towers of the City of Winnipeg transmission system from Point du Bois to Winnipeg. The successful bidder will be required to commence work in May.

*MEDICINE HAT, ALTA.—Bids are asked by W. P. Morrison, City Engr. and Comr., until April 30, for drilling a gas well.

COCHRANE, ALTA.—The Calgary Power & Transmission Co., Calgary, Alta., has made arrangements to supply this town with electric light and power. The company is negotiating to supply several other towns in the vicinity of Calgary.

NELSON, B. C.—The ALLIS-CHALMERS-BULLOCK CO., of Montreal, Que., have secured the contract for supplying the second unit for the civil power plant. Cost, $75,800.

DUNCAN'S STATION, B. C.—The Portland Canal Mining Co. is making plans for the installation of a power plant, aerial tram and concentrator at an approximate cost of $15,000. C. H. Dickie is Pres.

VICTORIA, B. C.—The British Columbia Electric Street Ry. Co. has asked for an exclusive franchise to deliver light and power from the plant they will construct at Jordan River at a cost of $1,500,000. R. H. Sperling is Gen. Mgr., Vancouver, B. C.

BRIDGES.

(* *denotes that this work is advertised in Engineering News.*)

*NEWBURYPORT, MASS.—Bids for rebuilding the old "Chain Bridge" over the southerly arm of the Merrimac River, between Newburyport and Amesbury, Essex County, will be received by the County Commissioners for said county, Court House, Salem, Mass., until 10 a. m., April 27. The work will consist of removing all necessary portions of the old structure and building complete new anchorages, cables, steel stiffening trusses, towers, steel floor beams, and wooden floor, with a short solid fill approach between reinforced-concrete walls. The length of floor of suspended span is about 226 ft. Specifications are on file at the office of Engineering News, New York. James P. Hale is Clk. Comrs.

BUFFALO, N. Y.—The Board of Aldermen has added to the annual budget the following: $50,000 for reconstruction of Smith St. Viaduct; $15,000 for Washington St. viaduct and $15,000 for Main St. viaduct, both the latter being over the New York Central & Hudson River R. R. tracks.

NEW YORK, N. Y.—Bids are asked by J. W. Stevenson, Comr. of Bridges, until 2 p. m., April 15, for furnishing and installing new gates, wedges and latch, and altering towing apparatus for the Washington Ave. bridge over the Wallabout Canal, in the Borough of Brooklyn, and for repairs to asphalt pavements on bridges over the Harlem River and in the Borough of Manhattan, during the year 1909.

*WANAQUE, N. J.—C. H. Unverzagt, 103 Park Ave., New York, submitted the lowest bid, it is stated, at $6,267, to the Board of Chosen Freeholders on March 17 for constructing a bridge over the Wanaque River at Wanaque.

BEAVER, PA.—The Pittsburg & Lake Erie R. R. Co. will construct a bridge over the Ohio River here, 1,800 ft. long, with a channel span of 769 ft., and height above water of 30 ft. The bridge will have two abutments and three piers. Each of the piers will be 110 ft. high from foundation on rock, and the top of the steel work will be 145 ft. above the track level, or about 240 ft. from the water to the extreme top of the bridge. The bridge is of the cantilever type.

WILKES-BARRE, PA.—Bids will be received by James M. Norris, County Controller, Wilkes-Barre, until 2 p. m., April 16, for repairing substructure and superstructure of bridge over Hunlock Creek, Hunlock Township.

SOUTH RENOVO, PA.—Bids are asked until 2 p. m., April 16, by the Clinton County Commissioners, Lock Haven, Pa., for the construction of a reinforced concrete bridge across Pete's Run here.

PORTSMOUTH, VA.—The city will construct a concrete bridge across Gander Creek at south end of Court St. Estimated cost, $3,500.

LYNCHBURG, VA.—CURTIS & SHUMWAY of Lynchburg have been awarded contract for the completion of the bridge over the James River on the new line of the Southern Ry. The bridge will be 1,000 ft. long and about 150 ft. above water.

PARKERSBURG, W. VA.—The city contemplates repairing the bridge across the Kanawha River at Juliana St. Estimated cost, from $5,000 to $10,000. W. H. Pedigo is Mayor.

CAMDEN, S. C.—The PENN BRIDGE CO., New Brighton, Pa., has been awarded contract for 375-ft. bridge consisting of one 130-ft. span, two concrete abutments and one concrete pier, at $38,089. M. C. West is County Supervisor.

MOBILE, ALA.—Benz Bros., of Mobile, are preparing plans for a bridge over Fowl River.

ROGERSVILLE, TENN.—The Pike Commissioners for Hawkins County have adopted plans for a steel bridge over the Holston River near Rogersville. The main bridge 350 ft., and about 400-ft. steel trestle. Contract will be awarded April 21 at the office of the Commissioners, J. R. Sanders, Clk. E. C. Coile is Engr.

LEXINGTON, KY.—The Cumberland River & Nashville R. R. Co. has awarded contract to the MONTICELLO CONSTRUCTION CO, J. H. Shear, Pres., Monticello, Ky., for the construction of a bridge across the Cumberland River. The structure will be 100 ft. high and 1,100 ft. long.

HAMILTON, OHIO.—Bids are asked until 10 a. m., April 20, by J. E. Brate, County Audr., for labor and materials for a bridge substructure and bridge at the Alexander farm over Talla Wanda Creek, section No. 9, Oxford Township.

NORTHBEND, OHIO.—Bids will be received until April 16 by the Board of County Commissioners, Cincinnati, Fred Dheihs, Clk., for constructing concrete bridge on Old State Road, Northbend, Miami Township.

MARIETTA, OHIO.—Bids will be received by the Board of County Commissioners until April 20 for constructing the substructures and superstructures of various bridges, abutments and other bridge work in several townships. A. F. Cole is County Surv.

CLEVELAND, OHIO.—The cost of rebuilding and reconstructing the Superior Ave. viaduct so as to make it a high level bridge was estimated at $1,374,779 by the City Engineer in a report submitted to the Mayor on March 30. The bridge as planned by the City Engineer calls for a paved roadway 58 ft. wide, with sidewalks 9½ ft. wide. A channel 250 ft. wide is provided for in the specifications, and the distance from bridge to water level would be 93 ft.

ELKHART, IND.—The Commissioners of Elkhart County and the St. Joseph Valley Traction Co. have secured plans for the construction of a joint bridge over the St. Joe River. It will be a plate girder bridge with concrete abutments and piers.

WINAMAC, IND.—The concrete bridge and dam constructed by the C., C. & L. R. R. Co. at Bruce Lake near here, and which was blown out by dynamite, will be rebuilt. It is reported that the company will let the contract as soon as plans can be made.

LAWRENCEBURG, IND.—The Cleveland, Chicago, Cincinnati & St. Louis R. R. Co. has ordered plans for the construction of an 8-span bridge near this city. It will also be used for a drive-way for vehicles.

GREENFIELD, IND.—Bids are asked by the Commissioners of Hancock County until 10 a. m., April 17, for the construction of a bridge over the Brandywine, known as the Pope Crossing. Chas. H. Troy is Co. Audr.

*EVANSTON, ILL.—We are officially advised that bids were received as follows on March 31 by the Board of Trustees of the Sanitary District of Chicago for the substructure of a bridge over the North Shore Channel at the crossing of the Chicago, Milwaukee & St. Paul Ry., near Chancellor St.: (a) total, with 60 piles, concrete, molded in place, (b) total, with 80 piles, concrete, furnished and driven: National Contracting Co., 502 Security Bldg., (a) $18,219, (b) $18,019; the Union Engineering & Construction Co., 164 Dearborn St., (a) $18,726, (b) $19,026; Empire Construction Co., 1115 Stock Exchange Bldg., (a) $19,427, (b) $19,363; Great Lakes Dredge & Dock Co., 138 Washington St., (a) $19,841, (b) $20,941; J. P. Dougherty & Co., 719 Chamber of Commerce, (a) $21,840, (b) $22,480; James O. Heyworth, 234 Michigan Ave., (a) $22,008, (b) $21,688; Standard Construction Co., 1547 First National Bank Bldg., (a) $22,229, (b) $22,689; Walsh & Mastersen, 724 Reaper Block, (a) $24,823, (b) $24,423; W. T. Turnes Co., 167 Dearborn St., (a) $27,505, (b) $27,905. All bidders of Chicago. J. J. Bryan is Clk. Bd.

CHICAGO, ILL.—Bids were opened on March 24 at the office of the Sanitary District of Chicago, J. J. Bryan, Clk., for excavation and construction of Section 9 of North Shore Channel. The lowest bid received was that of James O. Heyworth, Railway Exchange Bldg., Chicago, at the following prices: 375,000 cu. yds. excavation, 13 cts.; Devon Ave. Bridge, lump sum, $2,000; 2,500 cu. ft. concrete cylinders, 75 cts.; 3,000 lbs. water-tight metal linings, etc., 15 cts.; 125 cu. yds. Portland cement concrete, $6; 12,000 lbs. iron and steel reinforcing bars, etc., 2 cts.; Total, $54,065. Other bidders were: National Contracting Co., Chicago, $68,235; Callahan Bros., Inc., Omaha, Neb., $72,742; Robert Shannon, Joliet, $73,995; John W. Page, Chicago, $74,925; American Engineering & Construction Co., Chicago, $85,157; James J. Lynch, Chicago, $99,885.

*CEDAR RAPIDS, IOWA.—Bids are asked by the City Clerk until 2 p. m., April 24, for the construction of a steel reinforced-concrete bridge, consisting of seven spans of 80 ft., 40 ft. in width (including two 5-ft. walks), electric wiring and fixtures, and for removal of steel bridge now in use, and to be maintained during construction. P. P. Smith is Engr.

HUTCHINSON, KAN.—HOWARD & SON, of Hutchinson have been awarded contract for constructing a bridge over Caw Creek here, at $6,167.

LIVINGSTON, MONT.—The County Commissioners, Livingston, have awarded contract for building the bridge over the Yellowstone River, five miles up the canyon to the MONTANA BRIDGE & IRON CO., at $12,750.

BAY CITY, TEX.—The Galveston, Harrisburg & San Antonio Ry. Co., A. V. Kellogg, Engr. M. W., Houston, Tex., contemplates, it is stated, the construction of a bridge over the Trespalacios River.

GUTHRIE, OKLA.—Bids are asked by the city until 5 p. m., April 14, for two bridge abutments on South Second St. and Cottonwood River. E. W. Kinan is City Clk.

STOCKTON, CAL.—Bids will be received by the Clerk of the City Council until 5 p. m., April 12, for furnishing labor and material and for doing the work in moving North St. bridge from the intersection of Lower Sacramento road to intersection of Madison St. A. C. Russell is City Clk.

EDMONTON, ALTA.—Plans are being prepared for the construction of a bridge over the river at Sixth or Seventh Sts. F. M. Crosskill is City Secy.-Treas.

BUILDINGS.

(* *denotes that this work is advertised in Engineering News.*)

BOSTON, MASS.—Peabody & Stearns, Exchange Bldg., Boston, have been appointed architects for the proposed Custom-house changes. An order has been signed by the Secretary of the Treasury authorizing them to proceed with stduies and designs. Congress recently authorized the enlargement, remodeling, or extension of the present building and appropriated $1,800,000 for that purpose, including the cost of moving and providing temporary quarters for the offices while the alterations are being made. James Knox Taylor is Superv. Arch., Treasury Dept., Washington, D. C.

*NEW YORK, N. Y.—Bids were received as follows on April 3, at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of the foundations for the Assay Office, New York: P. J. Carlin Construction Co., 16 East 23d St., New York, $96,000; Merrill-Ruckgaber-Fraser Co., 50 Church St., New York, $79,400; Northeastern Construction Co., 225 Fifth Ave., $112500; Thomas B. Bryson, 165 Broadway, New York, $108,860; Foundation Co., 115 Broadway, New York, $104,873. Time, Nov. 1, 1909.

NEW YORK, N. Y.—Bids are asked until 3 p. m., April 15, by the Park Board, Henry Smith, Pres., for all labor and materials required for alterations and repairs to the Aquarium Building in Battery Park, Boro. of Manhattan, including reroofing, reflashing, furnishing new skylights, repairing old skylights, furnishing and setting new balustrade, cutting new openings in ceiling over pools, supplying sash, reglazing same, removing wooden braces and supplying new iron brackets between posts surrounding second-story galleries.

A 16-story structure is to be erected by A. Fillmore Hyde at the corner of 27th St. and Fourth Ave. on a plot of 12,500 sq. ft. The site has frontages of 53.9 ft. on Fourth Ave. and 162 ft. on 27th St. The building will have an exterior of limestone throughout the lower stories and, above that of brick and terra-cotta. The upper floors will be arranged for offices and lofts. The work of removing the old buildings now on the site will be begun on April 21, and it is expected that the new structure will be ready for occupancy by Feb. 1, 1910.

Plans for the 15-sty fireproof apartment house to be erected by the Five Hundred and Thirty-Five Park Ave. Co., at the northeast corner of Park Ave. and 61st St., measuring 53 × 100 ft., are about ready for estimates. The parties interested in the company are: Howard Mansfield, of Lord, Day & Lord, 49 Wall St., Pres.; H. B. Platt, 2 Rector St., Vice-Pres.; Charles Loring Brace, 105 East 22d St., Secy. The directors are: De Bach Emmett, 18 East 20th St.; James M. Townsend, of Townsend, Avery & Butler, 7 Nassau St.; Miss Emmett and Mrs. Whitlock. Herbert A. Lucas, 5 East 42d St., is Arch.

NEW YORK, N. Y.—Bids were received as follows on April 1 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for furnishing one stack for the Assay Office, New York: M. W. Kellogg Co., New York, $9,555; H. R. Heinicke, Inc., New York, $10,395; Conners Bros. Co., Lowell, Mass., $10,452; Alphonse Custodis Chimney Construction Co., New York, $11,575.

Plans have been filed for a 12-story fireproof commercial building to be built for the 17th St. Realty Co., D. W. Richman, Pres., at 243-247 West 17th St., running through the block to 232-234 West 18th St. It is to be of brick with terra cotta ornamentation, with a frontage of 50 ft. and a depth of 184 ft., and is to cost $350,000. Samuel Sass is Arch., Park Row Bldg.

Plans for a five-story parochial school to be erected for St. Anthony's Roman Catholic Church, Rev. Chaubino Viola, Rector, on Macdougal St., south of Houston St., have been filed. It is to be of modern style, of brick, finished with limestone and terra cotta trimmings, from designs by Nicholas Serracina, Arch., 1133 Broadway. It will have a frontage of 50 ft. and a depth of 100 ft., and is to cost $55,000.

Townsend, Steinle & Haskell, Archs., 29 East 19th St., have filed plans for enlarging Rogers, Peet & Co.'s store and office building at the southwest corner of Broadway and Warren St., by the addition of an eight-story and basement building on the west of the present structure, and covering the plot at 7, 9 and 11 Warren St. The addition will be of fireproof construction, with a facade of brick with trimmings of limestone and terra cotta, finished with large ornamental bays and harmonizing with the main building. It will have a frontage of 75.5½ ft. and a depth of 76.2 ft. It will cost $150,000.

Plans have been filed for two 6-story elevator apartment houses, each to contain 36 suites, to be built for the Fleischman Realty & Construction Co., 170 Broadway, at the southwest corner of Amsterdam Ave. and 177th St. and the southeast corner of Audubon Ave. and 177th St. Each will cost $125,000. George F. Pelham, 503 Fifth Ave., is Arch.

A 6-story apartment is to be built from designs by G. F. Pelham, Arch., 503 Fifth Ave., and to contain accommodations for 36 families, at the southwest corner of St. Nicholas Ave. and 187th St., for G. S., L. and M. S. Boehm. It will cost $125,000.

NEW YORK, N. Y.—We are officially advised that estimates are being received for construction of a 32-story building, 53 × 83 ft. to be erected at the corner of Nassau and Liberty Sts., by the Bryant Building Co. The structure will cost $1,200,000. Henry Ives Cobb, 42 Broadway, is Arch. The C. L. GRAY CONSTRUCTION CO., Victoria Bldg., St. Louis, Mo., has contract.

Plans have been filed for two 6-story flat-houses, with stores, and apartments for 25 and 26 families, respectively, to be built from designs by Charles B. Meyers, Arch., 1 Union Sq., for the Philo Realty Co., of which Gerson Hyman is Pres., at the northwest corner of Third Ave. and 75th St., at a cost of $85,000.

The Tilden Investing Co. has purchased a site adjoining the new building of the Union Dime Savings Bank, in course of construction. The Tilden Co. has bought land at 105 to 111 West Fortieth St., upon which will be built a 12-story loft and office building, with an underground connection with the Hudson tunnel. Work will be begun at once, and it is announced that 40% of the offices and lofts have been rented from the plans.

Plans have been filed for the improvement of the plot at the southeast corner of Seventh Ave. and 21st St., by a 7-story manufacturing loft building, with a frontage of 46 ft. to be built from designs by Michael & Mitchell Bernstein, Archs., 24 East 23d St., for Morris Mandelbaum, at a cost of $100,000.

NEW YORK, N. Y.—Bids are asked by Nicholas J. Hayes, Fire Comr., until 10.30 a. m., April 16, for furnishing all the labor and materials required for additions and alterations to building of Engine Company No. 12, located at 261 William St.

Bids are asked until 11 a. m., April 19, by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for installing heating apparatus in Public School No. 16, on Wilson St., near Bedford Ave., Boro. of Brooklyn; for installing heating and ventilating apparatus for additions to and alterations in Public School No. 84, on the south side of Glenmore Ave., between Watkins St. and Stone Ave., Boro. of Brooklyn; for installing heating and ventilating apparatus for additions to and alterations in Public School No. 87, on the westerly side of Washington Ave., between Pulaski and Lafayette Sts., Middle Village, Boro. of Queens.

NEW YORK, N. Y.—Plans have been filed for a 12-story commercial building to be erected for the Building & Engineering Co., 1133 Broadway, William H. Birkmire, Arch., 362 Broadway, at 928 and 930 Broadway with an L at 17 East 21st St., at a cost of $300,000.

Schwarz & Gross, Archs., 347 Fifth Ave., have prepared plans for a 12-story commercial building to be built at 40 West 17th St., for the Meteor Realty & Construction Co., 220 Broadway. Cost, $200,000.

Plans have been filed for a 7-story loft building, with ground-floor stores, to be erected at 146 and 148 West 28th St., for Quinn & Smith Co., 124 W. 18th St., at a cost of $75,000. Moore & Landsiedel, Third Ave. and 148th St., are Archs.

Bernstein & Bernstein, Archs., 24 East 23d St., have filed plans for a 6-story apartment house, to contain 31 suites of apartments, and to be built at a cost of $80,000, for L. & A. Pincus, 1199 Broadway, at 222 West 46th St.

BUFFALO, N. Y.—A site has been purchased adjoining the Y. M. C. A. building, Pearl and West Genesee Sts., for the erection of an 8-story fireproof men's hotel, at a cost of $150,000. The hotel will be operated by Y. M. C. A., but built by a company headed by John D. Larkin, Pres. the Larkin Co.

BUFFALO, N. Y.—Green & Wicks, Archs., 110 Franklin St., are preparing plans for a brick and structural steel stone trimmed residence to be erected on Lincoln Parkway, near Delaware Park, by Spencer Kellogg, Jr., to cost about $40,000.

Esenwein & Johnson, Archs., 775 Ellicott Sq. Bldg., have completed plans for a 7-story and basement commercial warehouse, 60 × 164 ft., with 30 × 64 ft., at the corner of Washington and Mohawk Sts., for Sinclair Rooney & Co., 36 East Eagle St. Construction will be of steel frame, pressed brick and cut stone, to cost $140,000.

The Central Presbyterian Church Society has sold its downtown church property and will use the proceeds for the erection of a new church of stone construction at Parkside, to cost $100,000. Architect not yet chosen. Rev. R. V. Hunter is Pastor, 481 Franklin St.

Michael Shea, Theatrical Mgr., and associates, have purchased the Central Presbyterian Church property at West Genesee and Pearl Sts., and are planning to erect a fireproof theater upon the site.

SCHENECTADY, N. Y.—Bids are asked by the County Board of Supervisors until 2 p. m., April 26, for constructing a county building here. According to the contract, the completed building, with furnishings, is not to exceed in cost the sum of $400,000. It is to be completed 18 months after the work is commenced. W. L. Stoddart, 33 East 17th St., New York, is Arch.

ALBANY, N. Y.—At a special meeting of the Board of Education a resolution was passed recommending that the Common Council take steps to acquire a site for a high school in the west part of the city. The building to cost about $350,000. Henry F. Snyder is Mayor.

JERSEY CITY, N. J.—The Board of Education has awarded contract for labor and materials required for the erection of School No. 33, Clendenny Ave., to the CALUMET CO., 15 East 59th St., New York, at $71,417.

ELIZABETH, N. J.—Bids were received as follows on March 31 at the office of the Supervising Architect of the Treasury, Washington, D. C., as supplementary bids to those recently received for the construction of the post-office at Elizabeth, N. J.: Bliss & Griffith, New York, $12,137; Charles H. Peckworth, New York, $9,752. The originl list of bids was published on March 11.

EBENSBURG, PA.—The County Commissioners have selected James K. Boyd, Arch., of Johnstown, Pa., to prepare plans and specifications for the proposed addition to be built to the county jail here this summer. The building will be three stories in height, of brick, stone and concrete, and will cost about $50,000, exclusive of the interior furnishings, plumbing, heating and wiring systems.

ERIE, PA.—The Masonic orders of this city have decided to erect a temple here on a site purchased at Peach and Eighth Sts., at a cost of $175,000. The building will be six stories in height, of brick, stone and steel construction, with concrete floors, marble and tile corridors, private lighting plant, steam heating and sanitary plumbing system, and electric elevators. There are six Masonic lodges here, and a building committee will be selected at once, which will be composed of three members from each lodge. This committee will award all contracts.

ALTOONA, PA.—The Altoona Board of Education has adopted plans as prepared by F. J. Shellar, of this city, for the High School to be built here this summer at a cost of about $100,000. Bids will be asked for jointly by the architect and the Board of Education immediately after the next meeting, and contracts awarded so that the work can be started as soon as the weather will permit in the spring. The building will be three stories in height, of reinforced concrete, brick and stone, with reinforced concrete floors and walls. It will have a private heating plant, elaborate plumbing system and electric lighting plant, drinking fountains supplied by artesian wells, etc.

PITTSBURG, PA.—George H. Shickler, Union Bank Bldg., has commissioned James T. Steen, Fulton Bldg., to prepare plans and specifications for six 4-story business buildings to be built this summer at Penn Ave. and 16th St., this city, at a total cost of about $125,000. The buildings will all be separate, but will be in the form of a solid block 120 × 110 ft. They will be of brick, trimmed with stone, will have plate glass fronts, electric elevators, plumbing and steam heating systems and will be built for light manufacturing or wholesale purposes.

Plans will be prepared at once by J. G. Chalfant, County Engr., this city, for an addition to be built to the Allengheny County Jail here. The present annex and the Pittsburg Academy building will be torn down in the spring, and the new structure, which will be either six or eight stories in height, will occupy the site. The building complete will cost about $250,000, and will be built of granite, concrete, steel and brick. It will have electric elevators, high-class plumbing and steam heating systems and marble corridors. The heat and light will be supplied from the central steam and electric plant in the present buildings.

BALTIMORE, MD.—The Hotel Caswell is to have a 4-story addition to the present structure at Baltimore and Hanover Sts., to cost about $60,000. Plans for the addition are being prepared, and as soon as they are finished will be submitted to contractors for bids. The Union Hotel Co., which owns and operates the Caswell and New Howard Hotels, expects to have the improvement completed by Aug. 1. The building adjoining the Caswell on Baltimore St. will be added to the hotel and four new stories erected on top of that structure. The new section fronts on Baltimore St. 30 ft. and has a depth of 140 ft. to Bank Lane. The addition will be of steel, concrete and brick, and will be fireproof. The same style of architecture as that of the main building will be followed. The addition will contain 60 rooms with a private bath, increasing the total number in the hotel to 150 rooms. Harry Busick is Mgr.

The Piel Construction Co. has been granted three permits to construct twenty-four dwellings on Arunah Ave., between First and Bentalou Sts., to cost about $75,000. Work of construction will begin in a few days. The houses are to be 2-story brick structures. The foundations will be of stone laid in cement and each will be covered with a slag roof and heated with steam. Eight of them will be located on each side of Arunah Ave., between First and Second Sts., and others will begin on the northeast corner of Arunah Ave., between First and Bentalou Sts. The buildings are expected to be completed by next fall.

BALTIMORE, MD.—Baldwin & Pennington, Archs., Professional Bldg., advise us that they are preparing plans for the enlargement of the Eutaw Savings Bank, at Fayette and Eutaw Sts. The improvements will consist of an addition of 60 ft. on the west side. The west wall will be taken out and the whole structure converted into one banking room, 60 ft. wide by 135 ft. long and 57 ft. high. The remodeling will cost about $200,000. William H. Hayden is Pres.

Haskell & Barnes, Archs., Wilson Bldg., have completed plans for a 6-story office building and warehouse to be erected on Pier 2 of the new dock system for the Standard Oil Co. It will be a steel frame, brick and stone structure of an ornamental design. The estimated cost is about $125,000. The estimates for the building will be in April 2, and the contract for the work will be let a few days later. The building will have a frontage of 70 ft. on Pratt St. and will extend 110 ft. on the new pier. One side will extend out over the water and will be constructed on concrete piles. The other part of the foundation will be constructed of stone and concrete. It will be a fireproof structure and the outer walls will be of red brick, with white stone trimmings. Each of the walls will be the same, with windows on all sides. The first three floors will be used for storage and the three top floors will be used for the offices of the company in this city. It will take about six months to complete the building after the contract is let.

ATLANTA, GA.—The Southern Ry. Co. will begin the construction immediately of freight terminals in Atlanta costing about $600,000. The total expenditures, including the real estate, will approximate $1,000,000. B. Herman, Washington, D. C., is Engr. of Bldgs.

DAYTONA, FLA.—Dr. E. L. Potter will erect at Daytona Beach a fireproof building, to be known as the Clarendon, at a cost of $300,000. Arrangements have been made and all details practically settled that the Clarendon will be located upon land owned by J. W. Erregger and Mrs. C. R. Oliver, on the ocean front.

DOTHAN, ALA.—Bids were received as follows on April 5 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, for the construction of a post-office building at Dothan, Ala.: Blue Ridge Construction Co., Asheville, N. C., $89,990; Gude & Co., Atlanta, Ga., $82,800; William P. Compton Realty & Building Co., Elmira, N. Y., $83,918; Hugger Bros., Montgomery, Ala., $98,089; Miles & Bradt, Atlanta, Ga., $87,000; King Lumber Co., Charlottesville, Va., $97,720; Algernon Blair, Montgomery, Ala., $97,500; Alfred Struck Co., Louisville, Ky., $83,500; George A. Clayton Co., Atlanta, Ga., $83,800; Charles Hoertz & Son, Grand Rapids, Mich., $93,769; D. J. Phipps, Newport News, Va., $83,391; Pharrow Construction Co., Atlanta, Ga., $81,500; Palmetto Construction & Improvement Co., Birmingham, Ala., $82,750.

YAZOO CITY, MISS.—Bids are asked until 3 p. m., May 10, by James Knox Taylor, Superv. Arch., Washington, D. C., for the construction complete of the U. S. post-office at Yazoo City.

RUSTON, LA.—Bids were received as follows on March 31, at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Ruston, La.: M. S. Hasie Construction Co., Dallas, Tex., $48,400; Gude & Co., Atlanta, Ga., $50,900; Fell & Ainsworth, Waco, Tex., $49,950; King Lumber Co., Charlottesville, Va., $53,400.

MEMPHIS, TENN.—The Memphis Railroad Terminal Co. will start work on the site for its proposed terminal buildings as soon as weather permits. The station and terminal will cost $3,000,000. Albert W. Biggs is Pres.

CLEVELAND, OHIO.—We are officially advised that a main office building for the Peerless Motor Car Co. is to be built this spring, completing the company's group of buildings on Quincy Ave. The main office building will be four stories high with a frontage of 57 ft. and a depth of 129 ft. There will be two wings also. On the main floor will be offices as well as salesrooms and a waiting room. On the top story of the central building will be drafting rooms. The building will be finished throughout with marble hallways and ornamental stairways. Contract for steel work has been let to McCLINTIC-MARSHALL CONSTRUCTION CO., Park Bldg., Pittsburg, Pa. Estimates are being taken on the general contract. J. Milton Dyer is Arch., Cuyahoga Bldg., Cleveland.

YOUNGSTOWN, OHIO.—The contract for the plumbing system in the $200,000 jail to be built here has been awarded to DEAN & HAVEN, Olean, N. Y.

CINCINNATI, OHIO.—The Oakley Park Co. will erect a $200,000 building. A total of 40 residences will be constructed.

INDIANAPOLIS, IND.—D. A. Bohlen & Sons, Archs., Majestic Bldg., advise us that they have prepared plans for the construction of a business house, 83 × 80 ft., for Dr. J. M. Kitchen on Pennsylvania St. Estimated cost, $100,100. The building will be four stories high and the entire outside will be constructed of cream enameled terra cotta, with trimmings of white. Bids for construction, for heating and plumbing and for wiring will be received separately, about April 15.

INDIANAPOLIS, IND.—The Bernard Realty Co., R. Kirschbaum, Pres., has let a contract to the BEDFORD STONE & CONSTRUCTION CO., for the erection of a 9-story business building at the corner of Capital Ave. and Washington St. The structure will be of concrete, with white glazed terra cotta front. Estimated cost, $200,000. Rubush & Hunter, American Central Life Bldg., are Archs.

The School Board is preparing to let contracts for construction of three school houses—one large one and two smaller ones. Bids will be in order when plans are completed.

INDIANAPOLIS, IND.—Bids will soon be in order for the construction of a hospital building for tuberculosis patients. Brubaker & Sternes, Archs., are preparing plans. Bids will be received by the Commission at the Governor's office.

The Indiana Legislature has made appropriations for the construction of new buildings as follows: Four new buildings at Epileptic Village, New Castle, $76,000; brick plant and an ice plant at School for Feeble Minded, Fort Wayne, $6,500 and $7,500, respectively; power-house, water system, heating system and lighting system at the Tuberculosis Hospital, $8,000; sewer, Indiana State Prison, Michigan City, $17,500, and retaining wall, Tippecanoe Battle Ground, $13,000.

James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., announces that plans will be completed for the following buildings to be constructed in Indiana this year: Bedford, $15,000; Brazil, $45,000; Columbus, $40,000; Elwood, $30,000, and Kokomo, $40,000. Money will be available after July 1.

DECATUR, IND.—Bids will be received by the City Council until 7 p. m., April 20, for the erection of a city hall. O. B. Wemhoff, City Clk.

PLYMOUTH, IND.—Bids are asked until April 15 by the Commissioners of Marshall County for remodeling the county court-house.

COLUMBUS, IND.—Bids are asked by the Commissioners of Bartholomew County until April 20 for remodeling the county court-house.

H. H. Bassett has awarded a contract to DUNLAP & CO., for the construction of a 3-story business building, 75 × 125 ft., on North Seventh St. The heating plant, wiring and plumbing will be let separately.

WARREN, IND.—Bids will soon be asked by the Trustees of the Methodists' Home Association, Rev. W. D. Parr, Chn., for the construction of an old folks' home. Estimated cost, $85,000.

RUSHVILLE, IND.—The Trustees of Arlington Township are preparing to ask for bids for construction of a school building at Arlington on the site of the building condemned by the State Board of Health.

HUNTINGTON, IND.—The Trustees of Jackson Township have secured plans upon which bids will be asked for soon for the construction of two new school houses.

RICHMOND, IND.—Bids are asked by the School Board until April 15 for construction of a high school building on Ninth and North B Sts. Estimated cost, $100,000. Bids for the installation of a heating plant, wiring and other equipment will be received later on.

CHICAGO, ILL.—The property at 441 to 465 Fifth Ave. is reported to have been purchased by the Wells-Fargo Express Co. The company is said to be contemplating the construction of a building to cost $2,500,000. The building will be used as an out-billing station. It is to be a combination of an office building and an express station. The ground has a frontage of 257 ft., with a depth of 106 ft.

*DANVILLE ILL.—Bids are asked until 3 p. m., May 12, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of the U. S. post-office and court-house at Danville.

MARQUETTE, WIS.—The following improvements are contemplated by the Greater Marquette University: An engineering building, designed to care for 500 students, at the corner of 13th St. and Grand Ave., to cost $200,000. A law building to cost approximately $100,000, site not yet chosen. The retention of the present university hall for the exclusive use of the college of letters and sciences. The use of the old Marquette College for the academy department. The eventual building of a gymnasium, on some site not yet chosen, at a cost of approximately $40,000.

ST. PAUL, MINN.—The contract for the superstructure of the Elbrecht Bldg., at Fifth and Seventh Sts., city, has been awarded by Buechner & Orth, Archs., Manhattan Bldg., to CHARLES SKOOGLUN, 1015 Jessie St., St. Paul. Cost, $40,000.

Hermann Kretz, Arch., New York Life Bldg., has awarded the contract for his 5-story reinforced concrete store building at Seventh and Cedar Sts. to LAUER BROS., foot of Chestnut St., and the ST. PAUL BUILDING CO., 460 Rice St. Cost, $91,000.

C. H. Johnson, Arch., 712 Manhattan Bldg., is preparing plans for a pressed brick and cut stone residence for John R. Mitchell, Pres. of the Capital National Bank, city. It will have slate or tile roof, mosaic and tile floors, oak and birch interior finish, steam heating, and electric lighting. Cost, $45,000.

ABERDEEN, S. DAK.—Steps have been taken by Aberdeen Masons to replace their present 3-story temple with a new and larger building, to cost about $100,000. A committee has been appointed to secure plans and specifications, after which the work of securing the necessary funds will be taken up.

HELENA, MONT.—Richard Lockey has purchased the lot in the rear of the Grandon Hotel facing on Sixth Ave. back to Allen St., and a 6-story addition will be erected on to what is now the rear of the present hotel on those lots. The entire old structure will be remodeled and the main lobby and office will be placed in the Sixth Ave. corner of Allen St., 1[illegible] ft. from Main st. Cost, $175,000.

FORT MISSOULA, MONT.—Bids are asked by Capt. C. D. V. Hunt, Constr. Q. M., until noon, April 29, for the construction, plumbing, heating and electric wiring of the following reinforced concrete buildings: One 4-set officers' quarters, one set field officers' quarters, four single set company officers' quarters, two double set company officers' quarters, one double barrack.

ST. LOUIS, MO.—Dr. A. N. Gaebler will spend more than $75,000 in building 28 brick cottages on Union Boulevard. The property has a frontage of 128 ft. on the west side of Union Boulevard between Julia and Goodfellow Pls., with a depth of 7[illegible] ft. A private street will be cut through the tract and the houses erected on each side in 25-ft. lots. The houses will be of four and five rooms. Plans and specifications for the dwellings are being prepared. The Ma[illegible]-Trepp Real Estate Co., Liggett Bldg., will have management of the property.

ST. LOUIS, MO.—A group of apartment houses, to cost over $100,000, is to be erected in Morrison's Addition to Tower Grove Heights by Leonard Buckel during the spring and summer. The first of these will be on the north side of Hartford St., between Russell Pl. and Oak Hill Ave. The excavation work has begun.

FORT SAM HOUSTON, TEX.—Bids are asked until 11 a. m., April 14, by L. J. Fleming, Constr. Q. M., for the construction, plumbing, heating, and electric work for two additional wards for post hospital and for one hospital corps barrack, at Fort Sam Houston, Tex.

SACRAMENTO, CAL.—The Governor has had passed to him for approval an appropriation bill amounting to $3,150,345. Of this amount the State University asks $925,647.35. Other state institutions are represented as follows: Stockton hospital, $149,000; Agnews hospital, $500,000; Napa hospital, $202,500; Patton hospital, $150,000; Mendocino hospital, $79,000; Home for Feeble-Minded, $90,000; Veterans' Home, $202,000; Preston Reformatory, $123,250; Whittier School, $84,300; Home for Adult Blind, $12,155; San Diego Normal School, $50,000; San Francisco Normal School, $62,000; Chico Normal School, $75,000; Los Angeles Normal School, $6,480; State Agricultural Society, $70,000; California Polytechnic, $273,200; San Quentin, $25,000; Folsom, $19,500. For state highways, $132,500 has been asked. Miscellaneous appropriations demanded amount to $5,162,283.

LOS ANGELES, CAL.—A 4-story reinforced concrete building to cost $80,000 will be erected at Los Angeles and Third Sts. by the Schwarz Building, Land & Improvement Co., H. W. Hellman Bldg. As soon as this building is completed, it is the intention of the company to erect a 6-story reinforced concrete hotel building adjoining it. The first structure will be located in Los Angeles St., 82 ft. north of Third St., and near the northeast corner. It will be 100 × 120 ft. The hotel building will have a frontage of 73 ft. on Los Angeles St. and of 134 on Third St. The buildings will be erected under the general supervision of A. L. Schwarz, Secy.

SAN FRANCISCO, CAL.—The Commissioners have ordered a communication sent to the Supervisors requesting that $160,000 be set aside for the construction of the Hancock Grammar School building. The plans and specifications for the school have been completed by Newton J. Tharp, City Arch., and approved by the Board of Education.

FORT MASON, (San Francisco post-office), CAL.—Bids were received on March 24, by Major George McK. Williamson, Q. M., U. S. A., for constructing one barrack building, one band barrack building and three double N. C. O. quarters, also installing heating, plumbing and electric wiring in same. Following are the bids: Lindgren-Hicks Co., Humboldt Bank Bldg., $49,113; F. H. Born, $99,732; C. Coghill, $57,900; William Bruce, $69,000; Frank Gallagher, $57,617; Pringle, Dunn & Moscrip, $51,000; Richard McCann, $52,230.

For the band barracks is Pringle, Dunn & Moscrip, $14,977; F. H. Born, $29,568; Lindgreen & Co., $15,540; C. Coghill, $19,500; William Bruce, $23,700; Frank Gallagher, $18,450.

Non-commissioned officers' quarters, Pringle, Dunn & Moscrip, $5,100; Burke Construction Co., $6,235; F. H. Born, $9,145; Lindgren & Co., $6,000; C. Coghill, $6,000; William Bruce, $7,700; Frank Gallagher, $6,800; Henning & Burke, $6,737.

PORT ARTHUR, ONT.—J. H. G. Russell, Arch., Silvester-Willson Bldg., Winnipeg, Man., is preparing plans for a business block to be erected here for R. A. Ruttan. Cost, $50,000.

Warren & Whitmore, Archs., 3 East 33d St., New York, are preparing plans for a depot to be built for the Canadian Northern R. R.

WINNIPEG, MAN.—J. H. G. Russell, Arch., Silvester-Willson Bldg., is preparing plans for a building for the Royal Bank to be erected at 460 Main St. It will be of stone, brick and steel construction.

H. M. Millman, financial agent, is having plans prepared for an apartment block to be erected here this spring.

W. H. Gardner is having plans prepared for an apartment block to be erected on Portage Ave. Estimated cost, $40,000.

Dr. R. I. Mattice, Canada Life Bldg., is having the excavating done for an apartment block to cost $220,000. It will be five stories, 100 × 128 ft.

WINNIPEG, MAN.—The T. Eaton Co. will build an addition to its department store, which will be 145 × 96 ft., and will add another story to the present building. Excavation has started; A. A. Gilroy is Mgr. J. A. Gould, 280 College St., is preparing plans for a brick and stone apartment block to be erected on Ellice Ave. for L. Lewis. John D. Atchison, Northern Bank Bldg., has plans for a 3-story brick, stone and steel bank and office building for the Canada Permanent Mortgage Corporation of this city. J. T. Gordon, of Gordon, Ironsides & Fares, is having plans prepared for a residence to cost $100,000, bids for which will be called soon. The Provincial Government has authorized an extension to the courthouse here, to cost $200,000. Robert Rogers is Minister of Public Works. Wardell & Nicholls, Archs., have been ordered to prepare plans and specifications for an apartment block to be erected on Broadway at a cost of $140,000. The Granite Curling Club will erect a brick curling rink here to cost $40,000; S. Jones is Secy.

WINNIPEG, MAN.—The Security Storage & Warehouse Co. will erect two warehouses here this year at a cost of $100,000; N. T. McMillan is interested. F. C. Patterson, Chn. of the Manitoba Telephone Commission states an exchange will be built in the west end of this city during the year. William Fingland, 490 Main St., is completing plans for a 5-story business block, 130 × 86 ft., to be erected on Portage Ave. for a local syndicate represented by C. H. Enderton. Nat Goldstein, of Springfield, Mass., is having plans prepared for a theater to be erected here with a seating capacity of about 1,500. A. M. Fraser will erect a department store and arcade here during the coming summer.

SASKATOON, SASK.—The city has purchased a site in the center of the city on which to erect a brick market building.

The Public School Board has decided to erect a $100,000 school this spring. James Clinskill is interested.

LETHBRIDGE, ALTA.—Bids are asked until April 10 for the work required in the erection of a fireproof hospital for the Trustees of the Galt Hospital. C. B. Bowman is interested.

NELSON, B. C.—The Y. M. C. A. will erect a building at a cost of $50,000. G. W. Kerby is interested.

KAMLOOPS, B. C.—Honeyman & Curtis, Archs., Vancouver, B. C., are preparing plans for the proposed courts and lands registry building to be erected here by the Government.

WATER SUPPLY—IRRIGATION.

(* *denotes that this work is advertised in Engineering News.*)

MARBLEHEAD, MASS.—The town proposes to install a filtration plant here. Estimated cost, $15,000. W. A. Johnson, of Boston, is Engr.

BROCKTON, MASS.—The Board of Aldermen has passed loan orders as follows: For water, $37,500, sewers, $20,000; drainage, $10,000.

MANCHESTER, CONN.—Plans have been prepared by the South Manchester Sewer Co. for building a large surface water system for the purpose of eliminating the dry brooks in the town. A considerable outlay of money will be required in this work, which will be started this spring.

NEW HAVEN, CONN.—Bids will be received until April 15 by Eli Whitney, Pres., New Haven Water Co., for constructing 8,400 ft. of 6½-ft. rock tunnel for water supply. A. B. Hill, 100 Crown St., New Haven, is Engr.

NEW YORK, N. Y.—Bids are asked until 2 p. m., April 14, by John H. O'Brien, Comr. Water Supply, Gas and Electricity, for furnishing and delivering valves, drive well pipe, double nozzle standard New York hydrants and repair parts for the same.

*NEW YORK, N. Y.—Bids were opened by the Board of Water Supply, on March 25 for contract No. 16, for the construction of about 2½ miles of plain concrete aqueduct known as cut-and-cover aqueduct, 17 ft. high by 17½ ft. wide inside, between New Hurley and a point about two miles east of Wallkill, in Shawangunk, Ulster County. The contract has been awarded to KING, RICE & GANEY, 280 Broadway, for $610,407. Itemized bids for Contracts 16 and 24 are given under Contract Prices in this issue.

*NEW YORK, N. Y.—Bids were opened on April 6 by the Board of Water Supply for contracts Nos. 17 and 18 for the construction of about 14,000 lin. ft. and about 15,600 lin. ft. respectively, of plain concrete conduit, known as cut-and-cover aqueduct, 17 ft. high by 17½ ft. wide inside. The work is located in the towns of Shawangunk, Ulster County, and Montgomery, Orange County, about eight miles northwest of Newburg. Bids or proposals were asked for either or both contracts separately and for both contracts combined, any bidder to make a bid for either contract, or for both contracts combined. The bids follow: Contract No. 17: Schnable & Quinn, Chicago, Ill., $699,255; Northeastern Construction Co., 225 Fifth Ave., $790,580; Clement-King Co., Land Title Bldg., Philadelphia, Pa., $772,530; Dravo Contracting Co., Pittsburg, Pa., $722,580; Henry F. Burgard Co., Buffalo, N. Y., $838,910; Robert C. Storrie, 31 Nassau St., $790,010; Acme Engineering & Contracting Co., 100 Broadway, New York, $782,625. Contract No. 18: Richard E. Henningham, 1 Madison Ave., New York, $876,250; Acme Engineering & Contracting Co., $884,125; Dravo Contracting Co., $955,705; H. P. Burgard Co., $1,105,375; Clement-King Co., $915,985; Robert C. Storrie, $949,425. Contracts Nos. 17 and 18: American Pipe & Construction Co., 112 N. Broad St., Philadelphia, $1,558,695; Acme Engineering & Contracting Co., $1,652,170; Millard & McDermott, 1116 Penn Bldg., Philadelphia, $1,701,590; Rogers & Haggerty, 121 W. 125th St., New York, $1,669,830.

ROOSEVELT (L. I.), N. Y.—The Directors of the Roosevelt Water, Light & Power Co. have awarded contract for erection of a pumping station to DAVID H. BROWN, JR. The first story is to be of concrete. The air pressure water system is to be used and stored in tanks with a capacity of 25,000 gallons to the tank. Estimated cost, $22,000.

*WARWICK, N. Y.—Bids for furnishing the materials and doing the work necessary for laying about two miles of c.-i. water pipe will be received by the Board of Water Commissioners until 2 p. m., April 16. The following are approximate quantities of materials to be furnished, laid and set: 6,400 ft. of 8-in., 4,300 ft. of 6-in. pipe; aggregate, about 223 tons; about 4½ tons of special castings; 21 valves, from 4-in. to 8-in., and valve boxes, 13 hydrants. Henry Pelton is Engr.

NEWARK, N. J.—The Board of Public Works on March 25 awarded contracts for supplying water meters to the HERSEY MFG. CO., E and First Sts., Boston, Mass., at $14,192, and to MACKNET & DOREMUS, and R. GRAY, JR., contracts for supplying the city with iron pipe and pig lead during the current year.

*EAST ORANGE, N. J.—Bids are asked until 8 p. m., April 12, by the City Council for supplying the Water Department with 5,000 ft. of 6-in., 3,500 ft. of 4-in., 1,000 ft. of 2-in. and 3,500 ft. of 1½-in. Byers guaranteed w.-i. pipe. Lincoln E. Rowley is City Clk.

READING, PA.—The Board of Water Commissioners on March 23 awarded contracts, it is stated, as follows: Material for the Maidencreek conduit, to PHILADELPHIA STEEL & WIRE CO., Philadelphia, $5,016; c.-i. pipe and special castings for city work to R. D. WOOD & CO., Philadelphia, $4,441; c.-i. pipe and special castings for pumping main to R. D. WOOD & CO., $16,571; gate boxes, to TEXTILE METAL WORKS, $1,175; water gates, to DARLING PUMP & MFG. CO., $1,788; Maidencreek pumping main, No. 2, Section 6, to ALBRIGHT & LEADER, $4,487; laying water pipe for distributing system, to JOSEPH A. MARTIN, $2,969; sluice gate for Maidencreek conduit and filter, to COFFIN VALVE CO., Boston, Mass.; fire hydrants, to R. D. WOOD & CO., and corporation cocks, to McARDLE & COONEY.

LEBANON, PA.—Contract has been awarded to RILEY & FRITZ, Lancaster, for enlarging dam No. 2, at $22,531. Noted last week.

MERCER, PA.—The Mercer Water Co. of this place has decided to install meters during the coming summer for all consumers. Bids for furnishing the required number of meters will be asked in May or June.

MEDIA, PA.—FRANK I. TAYLOR, of Media, has been awarded contract for construction work at the Media water-works.

PITTSBURG, PA.—Bonds of the city of Pittsburg to the amount of $1,975,000, for the purchase of the South Side plant of the Monongahela Water Co., were sold on March 15. N. S. Sprague is City Engr.

FORT WASHINGTON, MD.—We are officially advised that the lowest bid opened on March 30 by H. L. Pettus, Constructing Q. M., U. S. A., for extension to water and sewer mains here was that of Lyons Bros., Brookland, D. C.

NORFOLK, VA.—The Board of Control has awarded contract to DENBY GRADING CO., R. P. Denby, Pres., Norfolk, at $4,197, for material required in constructing water system on property of Westover Co. in Ghent, including water mains, fire hydrants, valves, etc.

GLOUCESTER, VA.—Bids will be received until April 10 by the Board of County Supervisors, A. T. Wiatt, Clk., for erecting in the public square at Gloucester Court House a windmill to have a tank of 10,000 gallons capacity, 35-ft. tower, galvanized; 2½-in. cypress tank, with 10-ft. wheel; pump and regulator for 50-ft. well, etc.

PULASKI, VA.—We are officially advised that the Town Council has directed plans and specifications prepared for a reservoir dam and pipe line main, the dam to contain about 550 cu. yds. of reinforced concrete and the pipe line about 15,000 ft. of 12-in. c.-i. pipe, 40 to 100 lbs. pressure, or about two-thirds may be machine made wood pipe, with all necessary valves, cast specials, etc. Bonds to the amount of $75,000 have been voted for this and other improvements.

PARKERSBURG, W. VA.—The City Council on March 24 passed an ordinance providing for a bond issue of $270,000 for the construction of a new water-works system.

PERRY, GA.—We are officialy advised that Hazlehurst & Anderson, Consulting Engrs., Atlanta, Ga., are preparing plans for a water system for Perry. Estimated cost, $15,000.

PAVO, GA.—The city has voted $12,000 of bonds for water-works and a school building.

FAUNSDALE, ALA.—We are officially advised that plans for the construction of the water-works system have been prepared and adopted by the Town Board. Bids are asked until April 19 for furnishing approximately 2,500 ft. of 4 and 6-in. c.-i. pipe, seven double nozzle fire hydrants, valves and boxes; for furnishing and erecting 40,000-gallon steel tank on steel tower, 40,000-gallon concrete covered reservoir, building power-house, furnishing boiler, duplex pumps, compressor and appurtenances. Plans and specifications can be seen at the office of Edgar B. Kay, Engr., Tuscaloosa, Ala., and bidding sheets can be had on application.

JACKSONVILLE, ALA.—The city has voted $12,000 of bonds for the construction of water-works. S. R. Wilkerson is Mayor.

FOLLANSBEE, OHIO.—The Citizens' Water Co., Charles Crawford, of this city, Pres., has been granted a franchise to supply the town with water. The concern, which has recently been formed, has been incorporated, and a meeting will be held soon for the selection of a site for the proposed water plant. Estimated cost, about $35,000.

EAST CLEVELAND, OHIO.—Bids are asked by the Board of Trustees of Public Affairs until noon, April 17, for laying a 6-in. water pipe in a portion of Phillips St., about 710 ft. Henry Wagner is Clk.

RICHMOND, IND.—The City Council contemplates the improvement and construction of an addition to the water-works plant owned and operated by the Richmond Water-Works Co.

HAZLETON, IND.—The Hazleton Water-Works Co. has been organized with H. P. Phillips, Pres. The company proposes to build an $8,000 plant to furnish water for domestic use and fire protection.

ELDORA, IOWA.—Bids will be received until April 12 by the Water-Works Committee, L. F. Brown, Chn., for furnishing and installing, complete, at the water-works station a deep well power pump head, a 100-HP. open heater and purifier and a strain boiler feed pump.

GOODRICH, N. DAK.—Bids are asked until noon, April 15, by W. J. Burt, Village Clk., for sinking a well.

VELVA, N. DAK.—We are officially advised that the date for receiving bids for water main extensions has been extended to May 4. Bids were asked until April 16. O. Claussen is Consulting Engr., German-American Bank Bldg., St. Paul, Minn.

BELLE FOURCHE, N. DAK.—Contract has been awarded to J. E. HILTON, of Vale, S. Dak., for the construction of main laterals involving the excavation of approximately 23,500 cu. yds. of material and 25.1 miles of small lateral excavation, in connection with the Belle Fourche irrigation project. The contract amounts to $10,111.

MISSOULA, MONT.—Contract for building a wing dam below the Bitter Root bridge has been awarded by the City Countil to O. E. PEPPARD at $5,643.

STEVENSVILLE, MONT.—We are officially advised that STRANGE & MAGUIRE, Salt Lake City, Utah, have been awarded contract by the Town Council for constructing water-works system at $20,037. Bids were opened on March 25. J. H. Kyd, Butte, Mont., is Engr.

SIKESTON, MO.—Bids are asked until 7.30 p. m., April 26, by M. G. Gresham, City Clk., for constructing water-works.

ST. LOUIS, MO.—Bids are asked by the Board of Public Improvements until noon, April 20, for a pumping station at City Insane Asylum; also boiler-house, two 1,500,000-gallon pumping engines, and steel elevated water tank of 200,000 gallons capacity. W. B. Dryden is Secy. Bd.

McGEHEE, ARK.—Nicholas Peay, Little Rock, Ark., will prepare plans for the construction of a water-works system here. Estimated cost, $20,000.

GALVESTON, TEX.—Bids will be received until April 12 by the Board of City Commissioners at the office of John D. Kelley, City Secy., for furnishing and delivering f. o. b. Galveston, 37 tons of 8-in. 10 tons of 10-in. and 55 tons of 6-in. c.-i. pipe.

ARDMORE, OKLA.—The city has voted $75,000 of bonds for improvements to the water-works. H. H. Sayre is City Engr.

LAMAR, COLO.—Bids will be received until April 12 by C. W. Heaton, Town Clk., for furnishing material and constructing portions of the extension of the water-works as follows: Section No. 2, 45,000 ft. of 12-in. vitrified pipe, ten 12-in. flap valves, ten 12-in. gate valves, 5,000 ft. of 7-ft. and 45,000 ft. of 4-ft. ditch for pipe, etc.; Section No. 3, reservoir; Section No. 4, pipe line, 979 tons 3 to 12-in. standard c.-i. pipe, 18 tons of 3 to 12-in. specials, 55 fire hydrants, 14,000 lin. ft. of 12-in. sectional stave wood pipe, etc.

PUEBLO, COLO.—The Potter-Turkey Creek Reservoir Co. has let a contract for the construction of a reservoir on Turkey Creek, 20 miles northwest of Pueblo, to OLSON BROS., of Denver, at $200,000. The reservoir will provide water for irrigating 12,000 to 20,000 acres of land in Pueblo County, chiefly the Teller tract.

BOULDER, COLO.—Articles of incorporation were filed on March 20 for the Supply Irrigation Ditch Co., which will take over the supply ditch, taking water from the St. Vrain River on the southwest quarter of section 17, Township 3 North, range 70 West. The directors are C. H. Baker, Henry Culver, F. D. Gibson, Joseph Lee and Ray P. Mathews.

SEATTLE, WASH.—The City Council has passed ordinances providing for the improvement of the following streets by laying water mains: 22d Ave. North and other streets, $3,900; 16th Ave. and other streets, $12,500; 32d Ave. West and other streets, $4,600; Ferdinand St., $4,400; West 58th St., $3,650; West 56th St., $2,600; 31st Ave. South, $3,200; Graham St., $7,050; Wilson Ave., $5,200. R. H. Thomson is City Engr.

VANCOUVER, WASH.—The contract for the construction of water-works here has been awarded by the Vancouver Water-Works Co. to the HURLEY-MASON CO., of Portland, Ore., at $17,000.

CORONA, CAL.—The Riverside Orange Heights Co. of Corona has awarded to ARTHUR TUTHILL the contract to construct a reservoir with a surface of 1¼ acres and 10 ft. deep. The irrigating system on the company's tract adjoining Corona will require between 18 and 20 miles of ditch and pipe line. There are to be a number of reservoirs, but the main one will cover about 25 acres, or 500 acre-ft.

YUBA CITY, CAL.—The following bids were received on March 22 by the city for the construction of a pump house for the water system: Nevada Machinery & Supply Co., San Francisco, $5,100 and $5,800; Hampton Hardware Co., of Marysville, $6,021 and $5,855; United Iron Works, San Francisco, $5,595 and $5,695; Samson Iron Works, Stockton, $7,548; Fairbanks-Morse Co., San Francisco, $6,767 and $6,902; DOAK GAS ENGINE CO., Oakland, $5,860 and $5,500 (awarded contract).

BISBEE, ARIZ.—The Bisbee-Waco Water Co., A. M. Martin, Supt., proposes to install one and perhaps two reinforced-concrete storage tanks, one of 1,000,000-gallon capacity, the other 500,000-gallon, the height not to exceed 50 ft.

OGDEN, UTAH.—Bids are asked by A. F. Parker, City Engr., until 2 p. m., April 19, for the construction of a distributing reservoir.

FORT FRANCES, ONT.—The ratepayers have voted in favor of spending $20,500 for extensions to the water mains.

JULIAETTA, IDAHO.—C. A. COCHRAN has the contract for constructing a water system here, at $6,830.

SEWERAGE.

HARTFORD, CONN.—The report of F. L. Ford, City Engr., for a large intercepting sewer to take care of the East Side flood problem has been accepted by the Court of Common Council, and the recommendations of the Board of Finance, carrying an appropriation of $200,000 for the work have also been adopted. The proposition will be submitted to the voters at the spring meeting for the purpose of providing the funds to carry on the work.

SOUTH MANCHESTER, CONN.—Cheney Bros. have completed plans for the construction of about 2½ miles of sewer mains and work will be started in a few weeks. The work will start on Main St. just north of Bigelow St., and will run north to the Middle Turnpike and east on Middle Turnpike to Summit St. This line of sewer, to connect with the trunk sewer, will extend from Main St. through Center Springs woods.

LONG ISLAND CITY (L. I.), N. Y.—Bids will be received until April 12 by Lawrence Gresser, Pres. Boro. of Queens, for constructing sewers in portions of Wilbur and Forest Aves.

RED BANK, N. J.—The contract for constructing the sewer in Maple Ave. has been awarded by the Board of Commissioners to JOHN F. KERWIN & CO., New Brunswick, N. J., at $4,865. Other bidders were: Allboro Constructing Co., $4,260; John McNabb, $6,844; Monmouth Contracting Co., $7,386; Hilpot & Co., $7,948.

HACKENSACK, N. J.—The F. R. LONG CO., of Hackensack, has secured the contract, it is stated, for constructing a reinforced concrete sewer, concrete retaining wall and filling on court-house property, at $20,052.

JERSEY CITY, N. J.—The Street and Water Board on March 24 awarded contract to PATRICK CONNOLLY, 13 East Hamilton Pl., for the construction of a reinforced-concrete sewer in the Claremont section, which is to parallel the Jackson Ave. outlet sewer, at 99% of standard or about $217,000. The work consists of about 1,500 lin. ft. 72-in. reinforced-concrete sewer, 960 lin. ft. 84-in. reinforced-concrete sewer, 100 lin. ft. 18-in. vitrified pipe sewer, 36,850 lin. ft. piles, driven; 88.45 M. ft. capping, 147.42 M. ft. flooring, 163 M. ft. sheathing, 59,828 lbs. of steel rods.

CAPE MAY, N. J.—Three contracts for the construction of storm water sewers on the east side have been awarded to J. HARVEY BENNETT, Cape May, by the Council at $13,337.

MILLBURN, N. J.—Bids are asked by the Township until April 19 for 3,625 ft. of 8-in. pipe sewer from 5 to 14 ft. deep, in various streets. Alexander Potter, 143 Liberty St., New York, is Engr.

UNION CITY, PA.—Councils have awarded the contract for the construction of a sewerage system here to the SOUTH SHORE CONSTRUCTION CO., of Erie, Pa. This contract also calls for the preparation of the plans and specifications for a disposal plant.

PHILADELPHIA, PA.—The Council has adopted a resolution authorizing the construction of main sewers, including extensions of Botanic Creek system, the Wingohocking system, the Wissahickon high-level cut-off intercepting sewer, Frankford intercepting sewer, Gunner's Run, Pennypack Creek intercepting and other sewers. Estimated cost, $600,000. George R. Stearns is Dir.-Pub. Wks.

WILKES-BARRE, PA.—Bids were opened as follows on March 25 by the Joint Sewer Committee of the City Councils for the construction of sewers in three sections. (a) Section 1, (b) Section 2, (c) Section 3—D. M. Rosser Engineering & Construction Co., Kingston, Pa., (a) $11,419, (b) $24,070, (c) $20,285; T. A. Harkness & Co., Wilkes-Barre, (a) $24,077, (b) $22,809, (c) $21,032; C. M. Riley, Wilkes-Barre, (a) $18,942, (b) $19,978, (c) $20,098; B. G. Coon Construction Co., Kingston, (a) $14,409, (b) $30,093, (c) $25,924.

Bids were also opened as follows for furnishing sewer pipe for above sections: Fred France, (a) $3,214, (b) $2,935, (c) $3,938; John A. O'Donnell Engineering & Construction Co., (a) $3,734, (b) $3,749, (c) $4,797; Charles Warner Co., (a) $3,320, (b) $2,911, (c) $3,956; T. E. Patterson & Co., (a) $3,427, (b) $3,032, (c) $4,152; George N. McAlarney, (a) $2,952, (b) $2,698, (c) $3,502.

*ERIE, PA.—Bids are asked until April 19 by the city for the construction of a system of sewers ranging in size from 9 to 15 ins. in diameter. Estimated cost, $44,000. B. E. Briggs is City Engr.

DOVER, DEL.—The State Senate has passed the bill authorizing the city to issue $100,000 of bonds for sewer and street improvements.

GREENVILLE, N. C.—Bids are asked by the city until April 14 for 2,000 ft. of sewer and surface drainage. Dresbach & Clark are Engrs., Greenville.

COLUMBIA, S. C.—The Burroughs & Moffett Co., of Columbia, are the lowest bidders at $4,363 for the extension of the sewer system to Elmwood territory. The extension will require 5,753 ft. of pipe sewers from 8 to 12 ins. A. W. Edens is City Engr.

ST. PETERSBURG, FLA.—The citizens on March 23 voted to issue $75,000 of bonds for sewers and other improvements.

*LOUISVILLE, KY.—Bids will be received by the Commissioners of Sewerage, W. C. Nones, Chn., until noon, April 16, for the construction of the Vernon Ave. sewer, contract No. 30. J. B. F. Breed is Ch. Engr.

FRANKLIN, KY.—Bids are asked until 11 a. m., April 21, by J. H. Covington, Mayor, for construction of about 5½ miles of vitrified pipe sewers, 6 to 15-in. in diameter, together with 46 manholes, 24 flush tanks and one concrete septic tank with reinforced-concrete cover. Granbery Jackson is Engr., Nashville, Tenn.

CLEVELAND, OHIO.—Bids are asked until noon, April 13, by E. H. McIntosh, Secy. Bd. Pub. Ser., for the construction of sewers in several roads and for sewer work.

UPPER SANDUSKY, OHIO.—Bids will be received by the Council until noon, April 14, for the construction of about 3,200 ft. of combined storm water and sanitary sewers, with the necessary appurtenances. A. H. Stutz is Clk.

STEUBENVILLE, OHIO.—Bids are asked until noon, April 12, by the Board of Public Service for the construction of a vitrified pipe sewer in La Belleview Boulevard. H. G. Simpson is Clk. Bd.

YOUNGSTOWN, OHIO.—Bids are asked until noon, Aprid 13, by the Board of Public Service for the sewering of several streets. W. H. McMillin is Clk. Bd.

LOCKLAND, OHIO.—We are officially advised that bids were opened as follows on March 29 by the village for a sewage disposal plant: B. NIEHAUS, 93 West McMillen St., Cincinnati, Ohio, $7,519 (awarded contract); T. L. H. Barr, Batavia, Ohio, $8,180; Melcher & Morrison, 1942 Fairmount Ave., Cincinnati, $17,203. The Riggs & Sherman Co. are Engrs., Toledo, Ohio.

GREENCASTLE, OHIO.—The construction of a sewer system in this city is under consideration.

DETROIT, MICH.—The lowest bid opened on March 23 by the Board of Public Works for the construction of the Carbon Ave. sewer was submitted by Julius Porath, 40 Fort St. West, at $29,800.

BAY CITY, MICH.—Bids will be received at the City Controller's office until 1.30 p. m., April 12, for furnishing materials for and constructing a 12-in. socket tile sewer in the center of Keisel St., from John St. to Jenny St. main sewer. G. Hine is Chn. Bd. Pub. Wks.

BURNHAM, ILL.—JIRTLE & SOMES, Chicago Heights, Ill., have been awarded contract, at $12,000, for constructing a sewer system for this place.

CICERO (Morton Park post-office), ILL.—Bids will be received until April 12 by the Board of Local Improvements, John F. Slapak, Secy., for constructing vitrified tile pipe sewers in 15th St., Prairie Ave. and other streets.

WAUKEGAN, ILL.—Bids will be received by the Board of Local Improvements, William S. Bullock, Pres., until April 16, for the construction of 18,854 ft. of concrete sewer, 60, 42, 36, 30 and 24-in. diameter, 600 ft. 18-in. vitrified tile sewer, with manholes, etc., in the Ravine sewer district. B. P. Thacker is Supt. Pub. Wks.

CLINTON, IOWA.—Bids are asked until April 13 by William E. Hayes, City Clk., for constructing 560 ft. of 15-in., 310 ft. of 12-in. and 470 ft. of 10-in. pipe sewer.

HUTCHINSON, KAN.—Bids will be received by William Snyder, Acting City Clk., until 5 p. m., April 9, for the construction of 3,957 lin. ft. of 8-in. standard vitrified-sewer pipe, 1,800 lin. ft. of 12-in. standard vitrified sewer pipe, 14 manholes and six automatic flushing tanks equipped with 5-in. Miller-Potter flushing siphons or equivalent.

WAYNE, NEB.—The date for opening bids for the construction of the proposed sewerage system has been extended to April 15. Bids were to have been opened March 22. Martin L. Ringer is City Clk.

ALLIANCE, NEB.—Bids will be received by the city until April 15 for the construction of a sewer system. Estimated cost, $45,000. Andrew Rosewater, of Omaha, is Engr.

GRAND FORKES, N. DAK.—P. McDONNELL, Duluth, Minn., has been awarded contract by the city at $69,478 for constructing a brick sewer in De Mers Ave.

ST. LOUIS, MO.—The FRUIN & COLNON CONSTRUCTION CO., Laclede Bldg., has been awarded contract by the city at $99,832, for constructing the first section of the Harlem Creek sewer. W. F. RILEY CONSTRUCTION CO., 617 Chestnut St., secured contract at $6,244 for constructing a sewer in Cora Ave. District No. 2.

HUBBARD, TEX.—The contract for the construction of a sewer system here has been awarded to TRUEHEART & JACKSON, of San Antonio. H. C. Bishop is City Secy.

GUTHRIE, OKLA.—Bids are asked by E. W. Kinan, City Clk., until 5 p. m., April 14, for the construction of concrete storm sewers in several streets.

ARDMORE, OKLA.—The city has voted $80,000 of bonds for sewer extensions here. H. H. Sayre is City Engr.

CARLSBAD, N. MEX.—Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are preparing plans for the construction of sewers here.

NORTH YAKIMA, WASH.—Profiles and specifications for the construction of 8,200 ft. of sub-sewer and 2,200 ft. of sidewalk have been accepted by the city.

EL CENTRO, CAL.—FRICK & WARE, Los Angeles, have been awarded contract by the city at about $26,000 for constructing a septic sewer system.

GARBAGE DISPOSAL.

NEW YORK, N. Y.—Bids are asked by Allen N. Spooner, Comr. of Docks, until noon, April 16, for furnishing all the labor and materials required for sprinkling certain new made land on the North and East Rivers, Borough of Manhattan.

Bids are asked by Allen N. Spooner, Comr. of Docks, until noon, April 19, for furnishing all the labor and materials required for furnishing carts with horses and drivers for disposing of street sweepings from piers and water-front property in the Boroughs of Manhattan, Brooklyn and Queens.

Bids are asked by William H. Edwards, Comr. St. Cleaning, until noon, April 14, for furnishing and delivering parts for sweeping machines.

CARNEGIE, PA.—Bids are asked by George Rosser, Boro. Clk., until 7 p. m., April 15, for hauling, removing and disposing of all garbage and refuse, animal and vegetable matter, in the borough. Bids will be received for one, five and ten years.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

HARTFORD, CONN.—One bid was received by the Board of Contract and Supply on March 29 for paving Capitol Ave., from Park River to Laurel St., with asphalt, that of the Southern New England Paving Co., as follows: $1.65 per sq. yd. for asphalting; 67 cts. per cu. yd. for excavating, and $6.35 per cu. yd. for concrete base. The bid was referred to the Engineering Department for computation.

Plans for 13,737 lin. ft. of State road work in the town of Old Lyme, on the New London and Lyme Turnpike, have been received from Daboll & Crandall, Engrs.

BUFFALO, N. Y.—Bids were opened at the office of the Grade Crossing Commission on March 18 for work at the Parkside, Colvin and Delaware Ave. crossings of the Belt Line. Nine bids were received, including masonry, excavation and paving. The bids were as follows, figures for stone and masonry being given first and for reinforced concrete second: Thomas Brown Construction Co., $133,571 and $126,595; John Miller, $137,465, $124,032; Mosier & Summers, $133,673, $154,123; McArthur Bros. & Co., $156,308, $138,136; John Johnson, $126,473, $120,864; Eastern Concrete Steel Co., $116,312, 106,997; John F. Stabell Co., $111,610, $102,827; H. P. Burgard Co., $117,611, $109,807; George R. Cooke, $127,378, $113,729.

F. G. Ward, Comr. of Pub. Wks., has awarded contract to the GERMAN ROCK ASPHALT & CEMENT CO., D. S. Morgan Bldg., for the repaving and widening of Broadway. Estimated cost, $140,000.

*SARANAC LAKE, N. Y.—Bids will be received by the Board of Village Trustees until 1 p. m., April 20, for grading, curbing, draining and paving certain streets with vitrified brick and the construction of macadam roadway on certain other streets. John L. Collins is Engr.

*KINGSTON, N. Y.—Following are the bids opened by the city on March 19 for the Broadway pavement: (a) for paving all except between the rails, (b) all that portion except between the rails and two feet outside, (c) total between curbs: John H. Gleason, Troy, fire clay, (a) $128,000, (b) $114,150, (c) $144,500; Shawmut clay, (a) $119,010, (b) $106,000, (c) $134,500; Shawmut shale, (a) $117,500 (b) $104,800, (c) $132,600. Ring & Foley, Paterson, N. J., climber block, (a) $124,283, (b) $110,947, (c) $139,118; Pittsburg-Buffalo Block, (a) $126,653, (b) $113,060, (c) $141,794; Catskill block, (a) $114,802, (b) $102,489, (c) $123,417. Connecticut Hassam Paving Co., Shawmut clay, (a) $126,642, (b) $114,201, (c) $141,460; Clearfield, (a) $120,529, (b) $108,760, (c) $134,560; Mack block, (a) $126,642, (b) $114,211, (c) $141,470. Beckwith-Mahnehm Co., Herkimer, N. Y., Bessemer block, (a) $154,000, (b) $138,000, (c) $173,000; Mack block, (a) $147,000, (b) $131,000, (c) $166,000; Clearfield, (a) $141,000, (b) $127,000, (c) $169,000; Metropolitan block, (a) $153,000, (b) $137,000, (c) $172,000. Morris Kantrowitz, Albany, Clearfield, (a) $117,000, (b) $105,000, (c) $131,000; Mack block, (a) $121,000, (b) $109,000, (c) $136,660. Standard Construction Co., Sandy Hill, N. Y., Shawmut clay, (a) $149,000, (b) $134,000, (c) $169,000; Clearfield, (a) $145,000, (b) $130,000, (c) $165,000; Mack, (a) $149,000, (b) $134,000, (c) $169,000. Eldridge & Grannis, Ossining, Clearfield, (a) $126,625, (b) $113,598, (c) $142,468; Mack, (a) $132,495, (b) $118,832, (c) $149,092; Metropolitan, (a) $135,950, (b) $121,896, (c) $152,971; Bessemer, (a) $135,452, (b) $121,452, (c) $152,410. Mulderry Bros., Albany, Mack, (a) $122,000, (b) $109,300 ,(c) $137,000; Bessemer, (a) $125,000, (b) $112,200, (c) $140,000; Pennsylvania clay, (a) $117,000, (b) $105,000, (c) $131,200; Johnston Briggs block, (a) $124,200, (b) $111,400, (c) $139,000; Clearfield, (a) $116,200, (b) $104,200, (c) $130,500; Catskill, (a) $115,100, (b) $103,308, (c) $129,995. John R. Baxter, Jr., Utica, Pennsylvania clay, (a) $137,936, (b) $123,011, (c) $155,705; Clearfield, (a) $137,936, (b) $123,011, (c) $155,705; Bessemer, (a) $149,313, (b) $133,156, (c) $168,547; Mack, (a) $144,573, (b) $128,929, (c) $163,196; Metropolitan, (a) $148,365, (b) $132,311, (c) $167,476. Bonacci Vincelli Construction Co., Brooklyn, sample brick on exhibition in City Hall, (a) $129,919, (b) $108,727, (c) $137,807. Charleston & Weston, Yonkers, sample brick on exhibition in City Hall, (a) $141,255, (b) $129,971, (c) $159,451. Dolland & Holler, Albany, Metropolitan, (a) $136,301, (b) $122,093, (c) $152,114; Bessemer, (a) $135,827, (b) $121,671, (c) $151,609; Mack, (a) $131,983, (b) $118,133, (c) $147,397; Shawmut, (a) $128,717, (b) $115,370, (c) $143,583; Clearfield, (a) $126,295, (b) $113,062, (c) $143,978; Pennsylvania clay, (a) $126,347, (b) $113,216, (c) $140,908.

ALBANY, N. Y.—MULDERRY BROS. have been awarded contract by the city, at $6,515, for improving Orange St. Walter Melius is City Engr.

*FORT WOOD, N. Y.—Bids are asked by William W. Bessell, Constructing Q. M., U. S. A., until 1.30 p. m., April 12, for repairing granolithic walks at Fort Wood.

NEW BRIGHTON (S. I.), N. Y.—Bids were received as follows on April 6 by George Cromwell, Pres. Boro. of Richmond, for (a) furnishing all the labor and materials required for regulating and repaving with vitrified brick pavement on a concrete foundation the gutters of Lafayette Ave., Sharp Ave., Elm St. and Maple Ave., from Richmond Terrace to Harrison Ave., and also the gutters of Townsend Ave., from a point 290 ft. west of Bay St. to Centre St.; (b) furnishing all labor and materials required for regulating and repaving with granite block pavement on a concrete foundation the south side of Richmond Terrace, from Morning Star Road to Van Name Ave. together with all work incidental thereto; (c) Prospect St., from Burger Ave. to Columbia St., Britton St., from Broadway to end of street, South St., from Burger Ave. to Broadway, Van Pelt Ave., from Richmond Terrace to a point about 175 ft. south of the Staten Island Rapid Transit R. R. crossing and Van Name Ave., from Richmond Terrace to the Staten Island Transit R. R. crossing: (a) Segretto & Benacci, $17,669; Wm. J. Quinlan, $17,945; James B. Sullivan, $20,869; John E. Donovan, $18,228; Joseph Johnson's Sons, $18,592; (b) Segretto & Bernacci, $10,704; John E. Donovan, 25 Morning Star Road, $9,934; Joseph Johnson's Sons, $10,309; (c) Segretta & Bernacci, $17,060; John E. Donovan, $20,607; Joseph Johnson's Sons, $19,156.

NEW YORK, N. Y.—Bids were received as follows on April 6 by Louis F. Haffen, Pres. Boro of the Bronx, for regulating, grading, setting curb-stones, flagging the sidewalks, laying crosswalks, building approaches and placing fences in Edenwald Ave. (Jefferson Ave.) between East 233d St. and the boundary line between New York and Mount Vernon: William F. Burnhardt, Williamsbridge, the Bronx, $34,876; Voorhees & Sullivan, $44,777; P. J. Duffy, $42,693; Wakefield Construction Co., $39,280; Frank Nordone, $45,480; W. F. Murray, $54,442.

NEW YORK, N. Y.—Bids are asked by the Park Board until 3 p. m., April 15, for repairing asphalt roadway pavements where directed in the Borough of Manhattan. Henry Smith is Pres.

BROOKLYN, N. Y.—Bids are asked by Bird S. Coler, Boro. Pres., until 11 a. m., April 21, for regulating, paving and repairing with asphalt on a concrete foundation, the roadways of various streets; also resetting brick gutters, grading, curbing and laying sidewalks on various streets.

NEWARK, N. J.—The Board of Public Works on March 25 awarded paving contracts to the STANDARD BITULITHIC CO., 422 Union Bldg., Newark, as follows: Warwick St., from Pacific St. to Adams St., $14,093; Merchant St., from Ferry St. to Clover St., $6,036; Fourth Ave., from North Eleventh St. to the city line, $6,954.

Ordinances to pave the following streets were passed: Maine St., from Ferry St. to Kossuth St., granite; Jelliff Ave., from Runyon St. to Watson Ave., brick; Chestnut St., from Prospect St. to Elm Road, brick.

*OIL CITY, PA.—Bids will be received by C. W. Mullalley, City Controller, until 7.30 p. m., April 12, for the following improvements: Constructing sewers: 210 ft. 4-in × 5-in. concrete culvert, 210 ft. of 6-in. sanitary sewer, and paving about 15,000 sq. yds.

CONNELLSVILLE, PA.—A State road will be built this year from here to Scottdale, a distance of about seven miles. The contract will be awarded later in the spring by Joseph W. Hunter, State Highway Comr., Harrisburg, Pa. Estimated cost, about $12,000 per mile. The 2-mile section from Connellsville to Moyer will be the first started.

HARRISBURG, PA.—The Central Construction & Supply Co. has submitted the lowest bid to the State Highway Commission for paving and curbing Thompson St., at $1.88 per sq. yd. for asphalt, 87 cts. for granite curbing and 65 cts. for granolithic.

ERIE, PA.—The Joint Street Committee of Councils on March 29 awarded contract for paving Huron St., from Chestnut to Cherry Sts., to JOHN McCORMICK & SON, Erie.

ELKTON, MD.—Contract for macadamizing about three miles of Rising Sun-Principio Road and one-half mile of Korner Ketch Road has been awarded to HORRIGAN CONSTRUCTION CO., of Wilmington, Del., at $25,272.

NORFOLK, VA.—The Greater Ghent Corporation has awarded contract to PERRY W. RUTH, of Norfolk, for laying 2,000 sq. yds. of asphalt block paving in Stockley Gardens extended and Maury Pl.

PORTSMOUTH, VA.—Bids are asked by the Permanent Road Improvement Commission, Alvah H. Martin, Chn., until noon, April 12, for the construction of a macadam road from Portsmouth to Deep Creek and for completion of Jamestown Boulevard in Tanner's Creek district.

ROANOKE, VA.—Bids are asked by R. H. Wills, City Clk., until noon, April 21, for the construction of curb and gutter on Holiday St., between Shenandoah and Patton Aves. W. B. Bates is City Engr.

SAVANNAH, GA.—The NEAL-BLUN CO. has been awarded contract at the following prices for furnishing the county with crushed granite: 650 tons 1½-in. at $1.76 a ton, and 500 tons of ¾-in. granite at $1.82 a ton.

JACKSONVILLE, FLA.—The Board of County Commissioners on March 26 awarded contract for furnishing 80,000 vitrified clay paving blocks to be used in constructing a quarter-mile of paving of the Lem Turner Road to the SOUTHERN CLAY MFG. CO., of Chattanooga, Tenn., at $19.60 per M. f. o.b. cars Jacksonville.

ST. PETERSBURG, FLA.—The city has voted $8,000 of bonds for street improvements, including paving of Central Ave. and Ninth St. H. A. Murphy is Mayor.

MONTGOMERY, ALA.—Montgomery County has voted $150,000 of bonds for road improvements.

MONTGOMERY, ALA.—Bids are asked by the city until April 19 for paving roadways Clayton St., South Lawrence, High, North Goldthwaite and Bibb Sts., East Jeff Davis Ave. and South Perry St. Robert Tait is City Treas.

NASHVILLE, TENN.—The Board of Public Works on March 27 awarded contract for about 25,000 vitrified brick for repairs to city pavements to the SOUTHERN CLAY MFG. CO., of Chattanooga, Tenn., at $20.40 per M. f. o. b. Nashville. The Kentucky Vitrified Brick Co. also submitted a bid of $21 per M.

SPARTA, TENN.—White County has voted in favor of issuing $50,000 of road bonds.

LOUISVILLE, KY.—The Board of Public Works on March 24, awarded contracts for asphalt construction, estimated to cost $126,916; about 40 blocks of streets. The following contracts were awarded: MARION COUNTY CONSTRUCTION CO., of Indianapolis, reconstruction, $63,97[illegible], new work, $8,987. The M. H. McGOVERN CO., of Chicago, resurfacing Third Ave. and Eighth St., $18,836, new work, $38,6[illegible]. AMERICAN STANDARD ASPHALT CO., of Louisville, $4,771. About $11,000 of the work advertised was not awarded, and new bids will be asked.

The Board of Public Works opened bids on March 27, for the construction of four alleys. The bidders were: [illegible] & McFarland, Lee Figg, George W. Gosnell and Henry Bickel. Prices ranged from $1.52 to $1.75 a sq. yd.

MOUNT HEALTHY, OHIO.—Bids are asked until noon, April 20, by Frank Williamson, Village Clk., for labor and materials for constructing cement sidewalks on a number of streets.

ELYRIA, OHIO.—SOL MENDELSON has been awarded contract, at about $110,000, for constructing brick pavement on Park Ave.

RAVENNA, OHIO.—Bids were received on March 22 by the city for paving West Main St. The lowest bidders were E. [illegible] MORGAN and V. K. WILLIAMS, of Ravenna, and the contract was awarded to them at $23,227.

PAINESVILLE, OHIO.—Bids will be received by the Board of Public Service until noon, April 13, for constructing concrete walks in the city. Will O. Doolittle is Clk.

ST. BERNARD (Cincinnati post-office), OHIO.—Bids will be received by the Village Clerk until noon, April 27, for furnishing the necessary labor and materials for the improvement of Spring Grove Ave. from the north end of Millcreek bridge to Carghage Pike. J. A. Stewart is Village Engr., 1112 Traction Bldg., Cincinnati.

COLUMBUS, OHIO.—James C. Wonders, State Highway Comr., has announced that $490,000 will be expended by the department this summer in improving the roads in all parts of the state. This sum will be equally divided among the counties, the apportionment for each being $5,588.

CAMBRIDGE, OHIO.—The Guernsey County Commissioners have decided to improve six miles of state road in the vicinity of this city, during the coming summer. About one-half of this distance will be macadamized, and the rest will be paved with brick.

FORT WAYNE, IND.—The Board of Public Works will soon ask for bids for paving the following streets or portions thereof, the pavement to be laid on broken stone foundation: Runnion, Main, Heustis, Broadway, Nelson, Berry, Lieth and Hoagland Sts. Plans have been ordered for the paving of the following streets with concrete foundations: Force, Buchanan, Pontiac, Hanna, Harrison, Woodland, Calhoun, Spy Run, Miner, Creighton, Wildwood, Fairfield and Meyer Ave.

ANDERSON, IND.—Bids are asked by the Commissioners of Madison County until 10 a. m., April 28, for the construction of the following gravel roads: The Markle road 9,800 ft. in length and the Brattan road, 10,643 ft. in length in Adams Township; the Snowhill road, 11,560 ft., the Wardwell road, 10,650 ft. and the Wisler road, 5,383 ft. in length in Duck Creek Township; the Etchison road, 7,940 ft.; the Hoppenrath road, 7,066 ft., the Jarrel road, 11,560 ft., the Russell road, 1,862 ft. in length in Pipe Creek Township. William T. Richards is County Audr.

MILWAUKEE, WIS.—The BADGER CONSTRUCTION CO. has been awarded contract by the city for 12,483 sq. yds. of asphalt paving, 3 ins. thick on a 6-in. concrete foundation, at $2.32 per sq. yd. Charles J. Poetsch is City Engr.

LAKE MILLS, WIS.—The date for receiving bids for 23,000 sq. yds. of asphalt macadam has been postponed from April 20 to some date in May, to be announced later. N. H. Falk is City Clk.

*TOMAH, WIS.—Bids will be received by the Committee on Public Works until 2 p. m., April 16, for the construction of a brick pavement and appurtenances. D. J. Aller is City Clk.

WEBSTER CITY, IOWA.—Bids are asked until 7.30 p. m., April 12, by the Board of Public Works, for paving.

ST. PAUL, MINN.—The Portland Stone Co., New York Life Bldg., has submitted the lowest bid to the city, at $70,595, for constructing cement sidewalks during the present year.

FORT D. A. RUSSELL, WYO.—Bids were received at the office of the Constructing Quartermaster, Cheyenne, Wyo., on March 23 as follows for constructing new roads, improving old roads and laying sidewalks at Fort D. A. Russell, Wyo.: (a) Morrison Contracting & Mfg. Co., Denver, Colo.; (b) Thomas L. Phillips, Denver, Colo.; (c) Nelson Bros. Paving Co., Minneapolis, Minn.; (d) Frank Walter, Denver, Colo.; (e) Dillon Stone Co., Denver, Colo.; (f) Perry Williams, Cheyenne; (g) Strange & McGuire, Salt Lake City, Utah; (h) J. S. McLaughlin & Sons, Topeka; (i) Charles W. Riner, Cheyenne: Concrete walks, per sq. ft., (a) 21.5 cts., (b) 13.5 cts., (c) 14.5 cts., (d) 21.75 cts., (e) 28.75 cts.; (f) 23 cts., (g) 13.33 cts., (h) 15 cts., (i) bid irregular; curb and gutter concrete, per lin. ft., (a) 76.5 cts., (b) 70 cts., (c) 74 cts., (d) bid irregular, (e) 95 cts., (f) 47 cts., (g) 54 cts., (h) 52 cts.; concrete walk, special, per sq. ft., (e) 35 cts.; roads completed, per sq. yd., (a) 74 cts., (b) 65 cts., (c) 49 cts., (e) $1.40, 30 ft., and $1.45, 60 ft., (f) 70 cts., (g) 41 cts., (i) 25 cts.; roads graded only, per sq.

yd., (a) 37 cts., (b) 32.5 cts., (c) 17 cts., (e) $90 cts., (f) 47 cts., (g) 19 cts., (h) 10 cts.; concrete culverts, per lin. ft., (a) $2.25, (b) $2.50, (c) $1.45, (e) $4, (f) $1.07, (g) $1.75, (b) $1.90); crossing, per lin. ft., (a) $1.49, (b) $1.25, (c) $1.67, (e) $1.25, (f) $1; (g) $1.25, (h) $1.60.

LITTLE ROCK, ARK.—O. P. SHELBY has been awarded contract by the city at $31,000 for paving, guttering and curbing 17 blocks in the South High St. paving district.

PARIS, TEX.—McKNIGHT & FREELAND have been awarded contract by the city for 7,000 sq. yds. of 5-in. concrete block at $1.33. W. S. LAUGHLIN and S. N. DOTSON have been awarded contract for about half a mile of concrete sidewalks, at an average cost of 14½ cts. per sq. ft. O. B. McKnight is City Secy.

ARDMORE, OKLA.—The city has voted $35,000 of bonds for paving street intersections. H. H. Sayre is City Engr.

SEATTLE, WASH.—The City Council has passed resolutions providing for grading and paving various streets with asphalt and for concrete walks. Estimated total cost, about $1,639,097. R. H. Thomson is City Engr.

FORT LAWTON (Seattle, Wash.), WASH.—NORMAN McKINNON has been awarded contract, at $6,249, for the construction of a gravel road at Fort Lawton.

SAN FRANCISCO, CAL.—The Board of Public Works on March 26 awarded contract to FLINN & TREACY, 1278 Market St., for paving Polk St., between Post and Sacramento Sts., at $17,000. Marsden Manson is City Engr.

RIVERSIDE, CAL.—The Council has opened bids as follows for paving Seventh St.: Star Cement Co., $13,716; Johnson-Shea Co., $13,343; Two Miracle Concrete Corporation, $12,098; Winters & Shull,; Rife & Cafe, of Redlands, $11,535.

SACRAMENTO, CAL.—See item under Buildings.

STOCKTON, CAL.—Bids will be received by the Clerk of the City Council until 5 p. m., April 12, for furnishing the labor and materials and doing the work in paving with asphalt concrete certain portions of Center St. A. C. Russell is City Clk.

SALT LAKE CITY, UTAH.—We are officially advised that P. J. MORAN, Atlas Block, Salt Lake City, has been awarded contract by the Board of Public Works for repairing paved streets at $22,565. Bids were opened on March 26. L. C. Kelsey is City Engr.

MANUFACTURING PLANTS.

DOVER, N. H.—It is said that the Pacific Mills Co. is planning to remodel the brick portion of the mills situated at the corner of Washington St. and Central Ave. The building is used as a storehouse at present.

SALEM, MASS.—We are officially advised that the Naumkeag Steam Cotton Co., of this city, will begin immediately the construction of a weaving room. The new building will be 250 ft. long and 200 ft. wile and of mill construction. Several of the company's tenement houses will be torn down to make room for the new building. The cost will be between $50,000 and $100,000. W. P. McMullan is Agt.

SPRINGFIELD, MASS.—The Farr Alpaca Co. has awarded the contract for building a 7-story stock-house in the rear of the Jackson St. mills to DANIEL O'CONNELL & SONS, for $50,000. The work on the structure will begin at once. The building will be of modern construction and will be finished by the middle of the summer. The building will cross the private railroad tracks of the company and will be arched over the elevated tracks used in bringing coal into the mill yards. This is the second big contract for buildings awarded by the firm, CASPER RANGER being awarded the contract for the erection of the addition to the finishing room and for the erection of weave sheds. Other buildings will be erected when the leases of the tenants expire on the tract recently bought by the company of the Holyoke Water-Power Co.

HAVERHILL, MASS.—M. T. Stevens & Sons, who own woolen mills here, in North Andover and Franklin, N. H., have decided to erect a weaving shed 270 ft. in length and 120 ft. wide on the mill property in this city. The addition to the plant will be built this spring and will give employment to about 1,000 operatives.

METHUEN, MASS.—Construction of a mill for the spinning of yarn is proposed by the owners of the Arlington Mills. In connection with this, a stockholders' meeting has been held to vote on an increase in the capital stock from $6,000,000 to $8,000,000; $1,000,000 of the new stock would be devoted to the plant. It is planned to have a mill 600 × 110 ft., four stories high. It will be built opposite the Arlington Cotton Mill in Methuen. The new issue of shares will be 20,000. The other $1,000,000 of the proposed increase of capital stock will be added to the working capital of the corporation.

ROCKVILLE, CONN.—The Rock Mfg. Co., makers of cassimere goods, has broken ground for an addition to its plant. The factory will be a 1-story brick and concrete structure, 50 × 180 ft., and it will be used by the carbonizing and finishing departments.

NEW HAVEN, CONN.—The New Haven Clock Co. has been granted a permit to erect a 5-story factory, which will be used with its present plant in Hamilton St. The factory is to be 82 × 33 ft.

The New York, New Haven & Hartford R. R. Co. has decided to remove its roundhouses and repair shops from the vicinity of Howard Ave. to the Quinnipiac Meadows, not far from Cedar Hill. The location which has been selected is near the junction of the Hartford, Shore Line and Air Line divisions of the road. E. H. McHenry, New Haven, is Vice-Pres.

LITTLE FALLS, N. Y.—We are officially advised that the TURNER CONSTRUCTION CO., 11 Broadway, New York, has been awarded a general contract for the construction of a reinforced-concrete factory for the Barnet Leather Co., Little Falls. This building will be 100 × 94 ft., four stories high. Linn Kinne is Arch. Work will be commenced at once.

NEW YORK, N. Y.—It is announced that James M. Horton, 213 East 24th St., will begin the construction of a fireproof 5-story steel, brick and concrete ice cream plant, measuring about 50x98 ft., on property at 209 to 211 East 24th St. The plans are in course of preparation by Frank Goodwillie, Arch., 1170 Broadway.

In the Building Bureau plans were filed for a 7-story factory building at the southeast corner of Seventh Ave. and 21st St. The building will cost $100,000 and will be built for Morris Mandelbaum.

NIAGARA FALLS, N. Y.—The Braas Bros. Co., 1110 Whitney St., will construct, on percentage basis, the manufacturing plant of eight buildings to be erected by the Development & Funding Co. on Buffalo Ave. The two principal buildings will be four stories high, 95 × 110 ft. and 48 × 110 ft., respectively, and of reinforced concrete. Total cost, $75,000.

DUNKIRK, N. Y.—The American Locomotive Co. will add to its Brooks plant on Roberts Road and the L. S. & M. S. R. R. A boiler and machine shop biulding will be built, with stone, brick and steel construction, 175 x 650 ft., 1-story, and truss roof. Cost, $300,000. Plans are being prepared and bids will be called for soon by the company's architect.

BUFFALO, N. Y.—We are officially advised that the Wheeler Elevator Co., Albert J. Wheeler, Pres., Western Savings Bank Bldg., will build a steel frame, reinforced-concrete bin elevator on the Buffalo River at Ganson St. The building will be 134 × 80 ft., 105 ft. high, with 33 bins 80 ft. high and 700,000 bushels capacity. Plans have been prepared by Harry A. Waite. General contract has been awarded to the MONARCH ENGINEERING CO., Chamber of Commerce Bldg.

We are informed that the New York State Steel Co. has let contract to the FRANK SWEET STRUCTURAL STEEL ERECTION CO., 540 Glenwood Ave., for the erection of fabricated steel ore unloading and hoisting trestle and "skiphouse" at its blast furnace on the Buffalo River and Abbott Road. Noted last week.

BATAVIA, N. Y.—The Worlds Dispensary Medical Association, 663 Main St., Buffalo, V. Mott Pierce, Gen. Mgr., will build a factory at Batavia, N. Y., for the manufacture of glass bottles. Plans are being prepared.

CARDINGTON, PA.—EDWARD FAY & SON, 2666 Richmond St., Philadelphia, have secured the contract to erect a plant here for the Western Ice Mfg. Co., to cost $65,000. Penn Engineering Co., Perry Bldg., Philadelphia, Pa., are Engrs.

CHESTER, PA.—Work is to begin soon on an addition to the Emmott Worsted Spinning Co. plant at Chester. The building will be of brick, two stories, 60 × 60 ft.

SPRING CITY, PA.—It is stated that George W. Reiff, owner of the Century Knitting Co., will build a 4-story mill, 50 × 150 ft.

PHILADELPHIA, PA.—Plans have been completed for the erection of a factory on the site of the residence of Commodore John Barry, at 245 South Sixth St. It is intended to start work next week. The improvement will be erected by Moses Bear, who owns the property. It will be a 5-story building of modern construction, occupying the entire lot, 21.6 × 128 ft., and will cost $10,000.

READING, PA.—Erection of a new factory is planned by L. M. Miller and James M. Stondt, proprietors of the Mount Penn Underwear Mill. They have purchased a lot, 80 × 130 ft., for the site. The structure will be three stories, and is expected to be completed about the middle of July.

BALTIMORE, MD.—The Consumers' Fertilizer Co. of Maryland will be incorporated soon with a capital stock of $500,000. The company has opened offices in the Keyser Building, at Calvert and German Sts. Sites for the factory will be considered soon. The intention is to erect a main factory, 250 × 250 ft., of three stories. This will be supplemented by two storage warehouses, each of 60 × 100 ft. dimensions. The whole plant will occupy several acres of ground.

WINCHESTER, VA.—C. A. Williams & Bros., of this town, will enlarge their woolen mill. The present plant, producing cheviots, has 400 spindles and eight looms. It is reported that the capacity will be doubled.

CHARLOTTE, N. C.—The Cotton Fiber Co., of this city, has been organized with C. O. Brown, Pres.; J. R. McDonald, Vice-Pres., and R. K. Blair, Secy.-Treas. It will erect a 2-story building, 40 × 80 ft., and will install machinery for manufacturing from cotton mill waste. The product will be recleaned and sold as fiber. This company was incorporated last month with a capital stock of $125,000.

ROCK HILL, S. C.—The Hamilton Carhartt Cotton Mills of Rock Hill, S. C., will build an addition. This company has engaged Capt. A. D. Hollerd as the superintendent in charge of construction and has begun the erection of a building which will be 140 × 140 ft. In this structure will be placed 400 looms and accompanying machinery for the production of denims, which are shipped to Detroit, Mich., for manufacture into overalls and kindred clothing in the factories of Hamilton Carhartt, president of the mill company. R. C. Bibberstein, of Charlotte, N. C., has been engaged as Engr.-Arch. in charge of the enlargement. About $50,000 will be expended for the improvements.

CLAXTON, GA.—It is proposed to build a cotton factory at Claxton. Judge W. F. Freeman, of this city, is interested in the proposition. Cost, $100,000.

NEW ORLEANS, LA.—It has been planned to extend and develop the Hernsheim branch of the American Cigar Co. into a cigar factory for New Orleans. The company will be reorganized. Probably $1,000,000 or more additional capital will be invested in the factory here.

MEMPHIS, TENN.—Alexander Fish & Co., of Nashville, Tenn., will establish a branch handkerchief mill at Memphis, it is stated, investing probably $25,000 for building and equipment of machinery.

ROCKWOOD, TENN.—The Rockwood Mills Co., of Rockwood, has awarded the contract to ADAMS & SCHNEIDER, of Chattanooga, Tenn., for the construction of a 1-story, 40 × 80-ft. addition to its present dye house, and will install machinery enabling the plant to dye goods which have heretofore been shipped to dyeing plants. About $10,000 will be the cost of the building and machinery. The company is operating 55 knitting machines and accompanying equipment.

LOUISVILLE, KY.—The Puritan Cordage Co. will erect a textile factory here, to cost about $25,000. Charles Todd Wolfe is Pres.

COLUMBUS, OHIO.—Dawson & Holbrook, Outlook Bldg., are preparing plans for a packing plant to be erected on Jackson Pike and Mound St. by David Davis Packing Co., at a cost of $75,000.

CANTON, OHIO.—Bids, including plans and specifications, are asked until April 12 by the Board County Commissioners for furnishing and installing at the County Infirmary a cooling and ice plant of 4-ton capacity; also a lighting plant capable of furnishing 376 16-c. p. lamps; steam power and well water furnished. W. M. Oberlin is County Audr.

MIDDLETOWN, OHIO.—The Gardner-Harvey Paper Co., has decided to build its new plant in this town and $250,000 will be spent in building and equipment. The officers of the company are all Middletown residents excepting Thomas E. Harvey, who is now a resident of Dayton, Ohio, but will move to Middletown. Colin Gardner is Pres.

DELAWARE, OHIO.—Bids, including plans and specifications, will be received by the Board Trustees, Girls' Industrial Home until April 23, for the installation of a cold storage equipment in the cold storage building at the home. Bids are to be submitted separately on labor, material and machinery. T. F. Dye is Secy.

HARTWELL (Cincinnati post-office), OHIO.—Bids are asked by the Board of Public Service of the city of Cincinnati until noon, April 16, for the erection and completion of a refrigerating plant to be erected on the grounds of the City Infirmary, Hartwell. Harry Hake, Andrews Bldg., Cincinnati, Ohio, is Arch.; John J. Wenner is Clk. Bd.

TERRE HAUTE, IND.—The McCraeken Bank Protective & Fire Alarm Co. has been incorporated with a capital of $100,000 to build and equip a factory to manufacture the McCraeken alarm system. James H. McCraeken is Pres.

MUNCIE, IND.—The INDIANA BRIDGE CO. has secured the contract to construct a steel and brick factory for the Muncie Automobile Wheel Co.

MILWAUKEE, WIS.—The Geuder, Paschke & Frey Co. has increased its capital stock from $150,000 to $1,000,000, and a 3-story factory building, 200 × 200 ft., will be erected as an addition to its plant, to cost not less than $50,000.

WOLSEY, S. DAK.—A 100-bbl. mill and elevator will be erected here by the Farmers' Co-operative Mill & Elevator Co.

ABERDEEN, S. DAK.—The Aberdeen Clothing Co. will erect a brick factory building, 50 × 130 ft. Westergard & Son are Archs. Contract will be let in April.

KANSAS CITY, MO.—A brick factory building will be erected on East 19th St. by Charles Vogel, at a cost of $20,000.

A 3-story reinforced-concrete factory building will be erected by J. G. Murphy to be occupied as branch of Philip Carey Mfg. Co., of Lockland, Station R, Cincinnati, Ohio. Clifton B. Sloan, Rickseker Bldg., Kansas City, is Arch.

SIMMS, TEX.—H. J. Hauck & Co., Kansas City, Mo., will rebuild a rice elevator recently destroyed by fire at a loss of $25,000.

TACOMA, WASH.—The Puget Sound Lumber Co. will rebuild a sawmill recently destroyed by fire at a loss of $75,000.

OKARCHE, OKLA.—A factory building, 60 × 150 ft., will be erected by the Okarche Milling Co. for the manufacture of cement blocks and cement partitions. W. M. Garrison is Mgr.

MONROVIA, CAL.—Plans for erection of a large manufacturing plant in Monrovia are under consideration by the Bonner Wrench Factory of Chrisman, Ill. C. E. Bonner is Pres.

ST. BONIFACE, MAN.—The Government has accepted, on recommendation of the National Transcontinental Railway Commission, the bid of HANEY, QUINLAN & ROBERTSON for the construction of the National Transcontinental terminal shops at St. Boniface. The amount of the bid, which was the lowest of those submitted, totals about $869,000.

MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—Items regarding irrigation, canal projects, etc., will be found under Water Supply—Irrigation.

STEEL RAILS, ETC.—See Trans-Continental Ry.

*SEEDING, SODDING, ETC.—Fort Wood, N. Y.—See Streets and Roads.

*DREDGING.—New London, Conn.—Bids are asked until noon, May 5, by Maj. Harry Taylor, Corps Engrs., U. S. A., for dredging in Connecticut River.

DREDGING.—Baltimore, Md.—Contract for dredging (bids opened March 24) has been awarded to MARYLAND DREDGING CO., of Baltimore, at about $70,000.

CABLE.—Toronto, Ont.—Bids will be received until April 30 by Mayor Joseph Oliver, Chn. Board of Control, for the supply of underground cable.

TELEPHONE SUPPLIES.—New York, N. Y.—Bids are asked by the Police Department until 10 a. m., April 15, for furnishing and delivering telephone supplies.

*DIPPER DREDGE.—Nashville, Tenn.—Bids are asked until 11 a. m., May 8, by Maj. Wm W. Harts, Corps Engrs., U. S. A., for furnishing machinery, fittings, etc., for dipper dredge.

CONCRETE WALLS.—Louisville, Ky.—Bids will be received by Capt. Lytle Brown, Corps Engrs., U. S. A., until May 1 for concrete walls, etc., at lock at Grand Rapids, Wabash River.

MAINTAINING BUOY.—Detroit, Mich.—Bids are asked until noon, April 15, by the Lighthouse Inspector, Detroit, for maintaining all the buoys for the fiscal year ending June 30, 1910.

*REMOVING WRECK.—New York, N. Y.—Bids are asked until noon, May 6, by Lieut.-Col. S. W. Roessler, Corps Engrs., U. S. A., Army Bldg., for removing the wreck of the S. S. "Daghestan."

RETAINING WALL.—Rockville, Conn.—Contract has been let to RICHARD FARRELL, at $5.80 per cu. yd., for constructing a retaining wall of 780 cu. yds. J. T. McKnight is City Engr.

*CONCRETE WALLS.—Louisville, Ky.—Bids are asked until 11 a. m., May 1, by Capt. Lytle Brown, Corps Engrs., U. S. A., for concrete walls, etc., at lock at Grand Rapids, Wabash River.

DITCH.—Mantorville, Minn.—Bids are asked until 11 a. m., April 16, by George L. Taylor, County Audr., for construction of Judicial Ditch No. 1. Estimated cost, $45,000. Estimated quantity, 450,000 cu. yds.

*DAM.—Detroit, Mich.—Bids are asked until 3 p. m., April 20, by Lieut.-Col. C. McD. Townsend, Corps Engrs., U. S. A., for superstructure of a movable dam for St. Marys Falls Canal, Sault Ste Marie, Mich.

CASTINGS.—Springfield, Mass.—Bids will be received until April 16 by Col. S. E. Blount, Comdg., for furnishing at the Springfield Armory steel, iron castings, during the fiscal year ending June 30, 1910.

*CEMENT, Wheeling, W. Va.—Bids are asked until 11 a. m., April 23, by Capt. F. W. Allstaetter, Corps Engrs., U. S. A., for furnishing and delivering about 9,000 lbs. of American Portland cement for Dam No. 26, Ohio River.

OAK PILES.—New York, N. Y.—Bids are asked by the Department of Docks and Ferries until noon, April 13, for Contract No. 1166, for furnishing all the labor and materials required for furnishing and delivering oak piles.

TUNNEL.—Chattanooga, Tenn.—Bids will be received by A. J. Gahagan, Chn. Mission Ridge Tunnel Comn. of Hamilton County, at Chattanooga, until April 15, for the completion of Mission Ridge Tunnel. W. L. Dodds, Co. Engr.

*BRONZE RAILINGS.—Washington, D. C.—Bids are asked by the Supervising Architect, Treasury Dept., Washington, until 3 p. m., April 30, for bronze railings and lamp standards for the east front of the Treasury Building, Washington.

CEMENT, PIPE, ETC.—Quebec, Que.—Bids are asked until April 12 for iron castings, brass castings, lead pipe and pig lead, cement, brick and drain pipes, required by Water-works department for the years 1909-1910. Jer. Gallagher, W.-W. Engr.

CEMENT.—Worcester, Mass.—Bids will be received until April 8 by George C. Moss, St. Comr., at the office of the Mayor, for furnishing the Water, Sewer and Street Departments with about 10,000 bbls. Portland cement for the year ending March 30, 1910.

LEVEES.—New Orleans, La.—The Orleans Levee Board has awarded contract for construction of the new levees along the New Basin Canal to the WINAMAC [illegible] CO. at 31 cts. per cu. yd. There will be about 115,000 cu. yds. of earth in the new levees, total cost, about $35,631.

FIRE-ALARM TELEGRAPH SYSTEM.—New York, N. Y.—Bids are asked until 10 a. m., April 16, by the Fire Department, for furnishing all the labor and materials required for establishing, completing and equipping an extension of the underground fire-alarm telegraph system.

SIGNAL SYSTEM.—Vancouver, B. C.—Bids were received by William McQueen, City Clerk, until 4 p. m., March 25, for installing complete a police patrol signal system. The contract has been let to the GAMEWELL FIRE-ALARM TELEGRAPH CO., 19 Barclay St., New York, N. Y., at $12,647.

SEAWALL AND DREDGING.—Norfolk, Va.—Bids are asked until 11 a. m., May 8, by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., for constructing a seawall and dredging at the Navy Yard, Norfolk. Specifications are on file at the office of Engineering News, New York.

CEMENT.—New York, N. Y.—Bids are asked until noon, April 20, by Geo. Cromwell, Pres. Boro. Richmond, for furnishing and delivering 500 bbls. of Portland cement at such points within the Borough of Richmond and in such quantities from time to time as the Superintendent of the Bureau of Highways may direct.

GRAVEL, TIMBER.—New York, N. Y.—Bids will be received until 3 p. m., April 15, by the Department of Parks for (1) furnishing and delivering Roa Hook gravel, or gravel or equal quality, on parks and parkways, Boro. of Manhattan; (2) for furnishing and delivering timber (No. 1, 1909) for parks, Boro. of the Bronx.

DITCHES.—South Bend, Ind.—Bids were received on March 27 by H. G. Miller, Constr. Comr., for constructing a main dredge ditch and lateral ditches Nos. 1 to 20, both inclusive. Contract has been awarded to YODER & SWARTZ, of Nappanee, Ind., at 5.96 cts. per cu. yd.; total cost, $13,200. Ralph E. Keller, Engr., South Bend.

WHARF.—Norfolk, Va.—Bids are asked until noon, April 10, by the Richmond Cedar Works, Norfolk, for the construction of a wharf and pier at Frying Pan, Alligator River, Tyrrell County, N. C. The work to be done consists of the construction of a wooden pier and the completion of a wharf and railroad with intermediate cribbing. P. C. Warwick, Jr., Engr.

LEVEE.—Kansas City, Kan., Bids were received at the office of the Kaw Valley Drainage Board on April 3, for about 165,350 cu. yds. of levee work, on left bank of Kaw River from Fifth St. to Southern Bridge. Contract has been let to CAMERON, McMANUS & JOYSE, of Keokuk, Iowa, at 15 cts. a cu. yd. A. M. Burns, Lyons Bldg., Kansas City, Kan., is Engr.; T. E. Myers is Secy.

*AIR COMPRESSOR.—East Orange, N. J.—Bids are asked by the City Council until 8 p. m., April 12, for one cross-compound duplex air compressor of about 1,500 cu. ft. air capacity, together with all necessary receivers, and air piping complete on foundations or in buildings to be furnished by the Water Department at White Oak Ridge pumping station, Milburn, N. J. L. E. Rowley, City Clk.

DREDGING.—Brooklyn, N. Y.—Bids are asked until 11 a. m., April 14, by Bird S. Coler, Boro. Pres., for (1) dredging Wallabout Canal, from Washington Ave., to Hewes St. Estimated quantity, 17,600 cu. yds. scow measurement. (2) For dredging Newtown Creek Canal, at and in the canal and basin included within the boundaries of Johnson Ave., Montrose Ave., Morgan Ave., Varick Ave., and also in the Stagg St. Basin. Estimated quantity, 4,415 cu. yds.

DITCHES.—Fairmont, Minn.—Bids were received on March 24 by the County Auditor for construction of ditches. Contract for the construction of the tile branches of judicial ditch No. 3 was awarded to LA GRUE & KRUSE, of Spencer, Iowa, at $48,970. Contract for construction of open branches was awarded to SUTTCLIFFE & BRYANT, of New Ulm, Minn., at $8,720.

The contract for the construction of Judicial Ditch No. 8, which is located in Nashville Township was awarded to the FAIRMONT CEMENT STONE MFG. CO., at $3,898.

GRASS.—New York, N. Y.—Bids were received by the Park Board at the office of the Department of Parks, on April 1, for furnishing and delivering 500,000 sq. ft. of clean grass sod for parks and parkways in the Boro. of Manhattan, and for furnishing and delivering 540 cu. yds. of clean white beach sand for playgrounds in the Boro. of Manhattan. Henry Smith is Pres: Bart Dunn, 444 East 68th St., $12.65 per 1,000 ft.; Atlanta Contracting Co., $13.95; Charles L. Doran, $15.90; Evergreen Construction Co., $18.90; William Young, $19; W. H. Masterson, $16.50.

FENCING, ETC.—Lynchburg, Tex.—Bids will be received until May 1 by W. C. Day, Supt. Pub. Bldgs. and Grounds, care Union Bank & Trust Co., Houston, for constructing 1,400 rods of wire fencing, with either first-class cedar or treated posts, on the lines of the San Jacinto State Park, on Buffalo Bayou, near Lynchburg; also for 200 rods of 5-strand barbed wire fence, first-class galvanized wire, posts as described above; also same time and place for plans and specifications for the general improvement and beautifying of the above park, to include wharf and pagoda and keeper's residence.

STONE.—Washington, D. C.—Bids were received as follows on March 31 at the office of the United States Engineer, Washington, D. C., for furnishing 2,000 cu. yds. of building stone, (a) and 5,000 cu. yds. of riprap (b) for use in Potomac Park: Wm. L. Miller, Boston, Mass., (b) $1.54 per cu. yd.; L. E. Smoot, Washington, D. C., (a) $2.48, (b) $1.38; National Mortar Co., Washington, (b) $1.39; McLanahan Granite Co., Port Deposit, Md., (a) $3.35, (b) $2.23; Columbia Granite & Dredging Co., Washington, (a) $2.75, (b) $1.275; (a) alternative bid, $2.20, if (b) be accepted; McCormick & Co., Philadelphia, (a) $3, (b) $2.40.

(Continued on page 117.)

CONTRACT PRICES.

[Where * precedes item under Contract Prices, the work was advertised in Engineering News.]

*PRESSURE TUNNEL.—New York, N. Y.—Bids were received by the Board of Water Supply on March 22 for Contract No. 24, construction of Turkey Mountain grade tunnel, a tunnel on the hydraulic gradient, 17 ft. high × 13½ ft. wide and 1,400 ft. long; Croton Lake pressure tunnel crossing under Croton Lake, 14 ft. inside diameter, and about 2,600 ft. long, with two shafts 510 to 560 ft. in depth; a blow-off tunnel about 400 ft. long, discharging into Croton Lake; and three sections, aggregating about 2,000 lin. ft. of cut-and-cover aqueduct, 17 ft. high × 17½ ft. wide inside, situated about six miles northeast of Croton-on-Hudson, in the town of Yorktown, Westchester County, New York. J. Waldo Smith is Ch. Engr. Bd. Itemied bids were received as follows: (A) BRADLEY CONTRACTING CO., 1 Madison Ave., New York (awarded contract); (B) American Pipe & Construction Co., 112 North Broad St., Philadelphia, Pa.; (C) The Dravo Contracting Co., 814 Lewis Block, Pittsburg, Pa.; (D) Gore-Meenan Co., 206 Broadway, New York; (E) Buffalo Dredging Co., 306 D. S. Morgan Bldg., Buffalo, N. Y.; (F) S. Pearson & Son, Long Island City, N. Y.; (G) Average of bid prices:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
12,000 cu. yds. rock excavation in shafts	$13.00	$20.00	$21.00	$20.00	$20.00	[illegible]	$18.63
26,000 cu. yds. excavation of pressure tunnel	6.00	7.50	7.00	6.25	7.50	[illegible]	6.89
160,000 lbs. furnishing structural steel roof support	.03	.03	.03	.03	.04	[illegible]	4.16
160,000 lbs. erecting structural steel roof support	.01	.01	.01	.03	.01½	.01½	.01½
3,765 lin. ft. drainage channels for shafts and pressure tunnel	1.50	2.00	1.50	2.50	1.50	[illegible]	2.00
100,000 mil. ft.-gal. pumping from shafts and pressure tunnel during construction	.20	.15	.20	.20	.20	[illegible]	.22
510 lin. ft. forms for lining of uptake shaft	10.00	6.00	7.00	8.00	7.25	[illegible]	7.64
690 lin. ft. forms for lining downtake shaft, blow-off chamber and drop manhole	10.00	6.00	8.00	8.00	10.00	[illegible]	8.26
2,625 lin. ft. forms for lining pressure tunnel	3.00	3.00	4.00	3.60	3.50	[illegible]	4.11
5,000 cu. yds. concrete masonry in shafts	6.00	6.00	7.00	10.00	8.00	[illegible]	7.05
10,000 cu. yds. concrete masonry in pressure tunnel	5.46	6.00	6.00	6.60	6.00	5.31	5.88
16,000 cu. yds. excavation of the aqueduct grade tunnel	6.00	7.00	6.50	6.00	6.50	[illegible]	6.33
1,500 cu. yds. excavation of blow-off grade tunnel	6.00	13.00	8.00	6.00	5.50	9.41	7.99
70 M. ft. B. M. permanent timbering in grade tunnels	25.00	70.00	70.00	60.00	60.00	109.00	65.67
1,820 lin. ft. drainage of grade tunnel	1.50	2.00	1.00	1.00	1.50	3.00	1.67
1,845 lin. ft. forms for lining of grade tunnels	3.00	5.00	3.00	3.00	3.50	7.58	4.18
4,200 cu. yls. concrete masonry in the aqueduct grade tunnel	5.17	5.75	5.50	5.25	5.75	5.31	5.45
700 cu. yds. con. masonry in blow-off grade tunnel	5.75	7.00	8.00	5.25	6.00	5.62	6.27
30 M. ft. B. M. temporary timbering	25.00	70.00	70.00	75.00	60.00	94.00	65.67
100 sq. yds. additional trimming in shafts & tunnels	3.45	7.00	5.00	5.00	5.00	7.92	5.56
1,000 cu. yds. excess con. masonry in shafts & tunnels	3.00	3.00	3.00	3.00	3.00	3.00	3.00
100 cu. yds. brick masonry in shafts and tunnels	11.56	15.00	15.00	20.00	17.50	25.36	17.40
1,700 cu. yds. dry packing in tunnels	2.30	3.00	2.50	3.00	2.50	3.17	2.75
400 lin. ft. drilling 1½-in. or smaller holes in rock or masonry	.50	.60	.50	.40	.40	.51	.49
400 lin. ft. drilling 1¾-in. to 2½-in. holes in rock or masonry	.50	.75	.50	.50	.50	.63	.56
8,000 lin. ft. steel pipe for grouting, etc.	.25	.30	.50	.25	.30	.32	.32
Steel pipe for grouting, etc. (lump sum)	1,725.00	3,000.00	2,000.00	2,000.00	1,500.00	2,375.00	2,100.00
2 high-pressure air-compressors for grouting	250.00	350.00	300.00	300.00	250.00	445.00	315.83
2 tank grouting machines	230.00	300.00	250.00	300.00	200.00	555.00	305.83
10 grouting pads	57.50	70.00	80.00	75.00	70.00	87.00	73.25
1,000 making connections of grouting machines to grouting pipes	1.15	2.00	1.00	1.00	1.00	1.06	1.20
400 setting grouting pads	1.15	2.00	1.00	1.00	1.00	1.27	1.24
500 tons sand for grout	1.75	2.00	2.00	2.00	1.75	2.72	2.04
700 cu. yds. mixing and placing grout	4.00	4.00	5.00	5.00	4.00	11.90	5.65
2 hydrostatic tests of pressure tunnel	500.00	2,500.00	1,500.00	2,000.00	2.500.00	1,270.00	1.711.67
30,000 cu. yds. removal of top-soil	.50	.40	.50	.50	.45	.38	.46
5,600 cu. yds. excavation for downtake chamber and portal cut below subgrade	1.00	2.50	1.25	1.00	1.50	6.17	2.24
850 cu. yds. excavation for uptake chamber	1.00	2.00	4.00	1.00	3.00	6.07	2.84
67,000 cu. yds. open-cut excavation north of Croton Lake, except as in Item 37	.60	.60	.60	.70	.80	1.22	.75
42,000 cu. yds. open-cut excavation south of Croton Lake, except as in Item 38	.60	1.50	1.20	1.20	1.35	1.19	1.17
38,000 cu. yds. refilling & embanking N. of Croton Lake	.40	.30	.30	.30	.35	.43	.35
46,000 cu. yds. refilling & embanking S. of Croton Lake	.40	.30	.30	.40	.35	.43	.36
22,000 cu. yds. surface dressing and grassing	.40	.40	.60	.50	.60	.68	.53
9,000 cu. yds. concrete msnry for aqueducts in open cut	5.17	6.00	5.00	6.25	6.00	5.37	5.63
3,700 cu. yds. concrete masonry for siphon chambers, culverts, etc	6.30	6.90	6.00	6.50	7.00	9.10	6.97
400 cu. yds. reinforced concrete not in tunnel	6.90	8.00	10.00	15.00	8.00	8.54	9.41
140 cu. yds. cut-stone masonry	25.00	40.00	25.00	75.00	60.00	44.50	44.92
200 lin. ft. reinforced-concrete ladders	4.60	2.50	2.00	4.00	3.50	3.80	3.40
50 cu. yds. dry rubble masonry and paving	2.30	3.00	3.00	4.00	3.00	6.82	3.69
50 cu. yds. rubble masonry and paving in mortar	3.35	4.00	3.50	5.00	4.00	7.61	4.58
52,000 bbls. Portland cement	1.70	1.60	1.70	1.70	1.70	2.63	1.84
25,000 lbs. sulphate of alumina for waterproofing concrete, mortar or grout	.02	.02	.02	.03	.03	.02	.02⅓
40,000 lbs. steel for reinforcing concrete	.03	.03	.03	.04	.04½	.05½	.04
5,000 lbs. miscellaneous cast iron, wrought iron & steel	.05	.10	.08	.10	.06	.19	.09⅔
40 tons cast-iron pipes and special pipe castings	57.50	60.00	100.00	100.00	100.00	120.00	89.58
15 miscellaneous gates and valves	57.50	60.00	100.00	100.00	100.00	127.00	90.75
8,500 lbs. bronze pipe and miscellaneous bronze	.75	.60	.80	1.00	.60	.91	.78
6,000 cu. yds. sand, gravel and broken stone	1.50	1.50	2.00	2.50	1.50	1.58	1.76
4,000 lin. ft. tile pipe, 6 ins. and less in diameter	.29	.25	.75	.50	.50	.79	.51
5,000 lin. ft. tile pipe 15 ins. to 18 ins. in diameter	.60	.40	1.00	.80	.80	1.11	.78
2,000 lin. ft. tile pipe, 15 ins. to 18 ins. in diameter	1.15	1.00	1.50	1.50	1.50	1.27	1.32
50 M. ft. B. M. timber and lumber	25.00	50.00	70.00	60.00	60.00	80.00	57.50
1,500 cu. yds. surfacing macadam roads	2.30	2.00	3.00	3.00	4.00	3.80	3.02
9,000 lin. ft. stone boundary walls	1.00	1.00	1.50	1.00	1.35	2.72	1.43
7,000 lin. ft. fences and guard-rails	.46	.25	.40	.50	.45	.73	.47
1 lock houses	1,500.00	1,750.00	1,500.00	1,000.00	1,400.00	1,585.00	1,455.83
2 testing portions of aqueduct in open cut	500.00	1,000.00	750.00	1,200.00	900.00	790.00	856.67
500 lin. ft. testing portions of aqueduct in open cut exceeding 200 ft	1.00	4.00	2.00	2.00	4.50	1.58	2.51
50 months medical and surgical practitioners	150.00	75.00	150.00	200.00	125.00	365.00	177.50
43 months sanitary services	300.00	110.00	500.00	300.00	500.00	428.00	356.33
Cleaning up (lump sum)	1,000.00	1,000.00	1,000.00	3,500.00	500.00	4,755.00	1,959.17
Total	$973,694	$1,172,670	$1,180,107	$1,184,632	$1,218,275	$1,357,675	....

Time: 43 months. Bond required: $250,000.

*AQUEDUCT.—New York, N. Y.—Bids were received on March 25 by the Board of Water Supply of the City of New York for Contract 16, a portion of the Newburg Division of the Catskill Aqueduct. Bids in detail were received as follows from (A) KING, RICE & GANEY, 280 Broadway, New York (awarded contract); (B) Joseph L. Sigretto, 1455 Woodhaven Ave., Brooklyn Manor, Queens County, New York; (C) Clement-King Co., Inc., Land Title Bldg., Philadelphia, Pa.; (D) North Eastern Construction Co., 235 Fifth Ave., New York; (E) Elmore & Hamilton Contracting Co., Albany, N. Y.; (F) Richard E. Heningham, 1 Madison Ave., New York; (G) Dravo Contracting Co., 814 Lewis Block, Pittsburg, Pa.; (H) Rodgers & Hagerty, 121 West 125th St., New York; (I) Gore-Meenan Co., 206 Broadway, New York; (J) American Pipe & Construction Co., 112 North Broad St., Philadelphia, Pa.; (K) Robert G. Storrie, 31 Nassau St., New York; (L) Schnable & Quinn, 1037 Stock Exchange Bldg., Chicago, Ill.; (M) average of bid prices:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
23,000 cu. yds. removal of top-soil	$0.35	$0.30	$0.40	$0.38	$0.39	$0.35	$0.40	$0.45	$0.50	$0.50	$0.40	$0.32	$0.39½
176,000 cu. yds. open-cut excavation	.50	.35	.45	.50	.50	.55	.50	.47	.70	.60	.65	.65	.53½
172,000 cu. yds. refilling and embanking	.25	.30	.30	.30	.33	.35	.25	.30	.30	.30	.30	.40	.31
16,000 cu. yds. surface dressing and grassing	.40	.30	.45	.50	.40	.40	.40	.60	.50	.40	.50	.60	.45½
60,000 cu. yds. concrete masonry for aqueduct in open cut and on embankment	5.15	5.50	5.40	5.60	5.75	5.50	6.10	6.00	5.50	5.70	5.60	5.84	5.64
1,500 cu. yds. concrete masonry for culverts, retaining walls, etc	7.00	6.00	6.00	5.60	5.75	7.00	7.00	8.00	6.50	7.00	7.00	6.00	6.57
200 cu. yds. rubble masonry anl paving in mortar	5.00	10.00	6.00	5.00	4.00	8.00	3.50	4.00	4.50	5.00	4.00	4.00	5.25
77,000 bbls. Portland cement	1.50	1.50	1.60	1.60	1.55	1.50	1.50	1.50	1.50	1.80	1.80	1.56	1.58
1,100 cu. yds. dry rubble masonry & paving	3.00	3.00	4.50	3.00	3.00	3.00	3.00	4.00	2.50	3.50	3.00	4.00	3.29
250 cu. yds. crushed stone and gravel	2.25	2.00	2.00	2.00	2.00	2.50	1.75	2.00	2.00	2.00	3.00	4.00	2.29
900 cu. yds. surfacing macadam roads	3.00	2.00	2.00	4.00	2.00	3.50	2.00	1.00	3.00	4.50	3.00	5.00	2.92
1 sluice gate	100.00	100.00	150.00	150.00	90.00	100.00	90.00	100.00	150.00	100.00	150.00	100.00	115.00
1 ton cast-iron pipes & special castings	100.00	65.00	100.00	100.00	90.00	100.00	100.00	200.00	150.00	100.00	150.00	90.00	112.08
1,200 lin. ft. vitrified pipe	1.00	1.00	1.50	1.00	1.00	1.50	1.00	1.00	1.00	1.50	1.75	1.50	1.23
100 M. ft. B. M. timber and lumber	50.00	40.00	60.00	50.00	50.00	55.00	60.00	50.00	60.00	50.00	50.00	45.00	51.67
2,500 lin. ft. stone boundary walls	1.25	2.40	1.00	1.25	1.10	1.10	1.30	1.20	.90	1.25	1.50	2.00	1.35
3,000 lin. ft. fences and guard-rails	.30	.20	.30	.35	.30	.40	.30	.60	.40	.30	.50	.44	.36½
110,000 lbs. steel for reinforcing concrete	.05	.02	.04½	.05	.04	.04½	.03	.03	.05	.03½	.05	.03½	.04
2,000 lbs. wrought iron, cast iron and steel	.06	.03	.04	.06	.06	.06	.06	.10	.08	.10	.10	.08	.07
300 lbs. bronze	.50	.50	.50	.60	.48	.50	.60	.75	.60	1.00	.75	.50	.61
4 testing portions of aqueduct	800.00	700.00	800.00	250.00	750.00	750.00	750.00	500.00	1,200.00	500.00	1,000.00	800.00	733.33
1,000 lin. ft. testing portions of aqueduct exceeding 200 ft. in length	2.00	6.00	3.00	2.50	2.50	4.00	2.00	2.50	2.00	2.00	2.50	2.00	2.75
Cleaning up (lump sum)	1,000.00	3,000.00	5,000.00	3,000.00	2,500.00	5,000.00	1,000.00	1.00	2,500.00	2,400.00	5,000.00	5,500.00	2,991.75
Total	$610,407	$613,175	$639,680	$655,265	$662,199	$664,795	$665,977	$667,896	$682,490	$697,375	$705,925	$718,050	....

Time. 42 months. Bond required: $250,000.

MISCELLANEOUS CONTRACTS.

(Continued from page 116.)

RETAINING WALL.—New York, N. Y.—Bids were received as follows on April 6 by George Cromwell, Pres. Boro. of Richmond, for furnishing all the labor and materials required for constructing a reinforced-concrete retaining wall on Stuyvesant Pl., and other work in connection with the St. George ferry approach: Segrette & Bennacci, $116,889; Joseph Johnson's Sons, $168,261; Turner Construction Co., 11 Broadway, $150,291; G. B. Spearin & Co., $132,431; Ferro-Concrete Construction Co., 1 Madison Ave., $116,640; Rodgers & Haggerty, 75 Henry St., $125,728; Gustav Kaufman, $174,428; L. I. Contracting Co., $156,950.

LANDSCAPE WORK.—New York, N. Y.—Bids were received as follows on April 1, by the Board of Trustees of the College of the City of New York, 17 Lexington Ave., for the landscape work about the buildings of the College of the City of New York, located on St. Nicholas Terrace, 140th St., Amsterdam Ave. and 138th St., Boro. of Manhattan, City of New York: BART DUNN, 444 East 68th St., New York, $14,000 (awarded contract); Kelly & Kelley, 45 East 42d St., $24,498; Atlanta Contracting Co., $36,000; W. R. Skillman, $24,400; Henry A. Seabrecht, $17,227; John H. Troy, $30,907; William H. Masterson, $19,391; Voorhees-Sullivan, $41,440. D. W. Langton, 347 Fifth Ave., is Landscape Arch.

LAYOUT OF GROUNDS.—New York, N. Y. Bids were received as follows on April 5 by John W. Brannan, Pres. Bd. of Trustees, Bellevue and Allied Hospitals, for labor and materials required for all the excavation, top soil, sodding, seeding, concrete work, stone work, brick work, iron work, plumbing, carpenter and other work in the layout of the grounds, paths, fences and inclosing walls and gateways at the new training school for women nurses, Bellevue Hospital, foot of East 26th and 25th Sts., the City of New York; Kelly & Kelley, Inc., 45 East 42d St., New York, $11,796; Joseph Moore, $13,832; Concourse Construction Co., $13,430; C. L. Dooley, 5 Beekman St., $13,500; Thomas Lenigan, $13,969; Louis Wechsler, $18,000; Christopher Nalley, $15,060; Phoenix Construction Co., 41 Park Row, $18,394; Cooper & Evans Co., 220 Broadway, $13,165; Clarke & Stowe ,$12,500; William H. Masterson. $14,500; P. J. Carlin Construction Co., 16 East 23d St., $15,570; Joseph DeBenedetto, $14,500; H. B. Smythe, $13,639; Bart Dunn, 444 East 68th St., $20,574.

THE WESTINGHOUSE MACHINE CO., at East Pittsburg, records contracts for no less than nine horizontal engines for the past two months. The most recent contract covers two 750-HP. tandem units for the Iola Portland Cement Co., Iola, Kan. They will be installed in an extension to the large cement mill at Iola. It is noteworthy that the Iola Co. have had nearly ten years' experience with gas engines in their cement mills and the operating equipment comprises fourteen engines of vertical and horizontal type, all of Westinghouse construction, some of which have operated for the entire period. The horizontals are of the same type as the new engines, and have established for themselves a record of over a month's continuous operation without closing the throttle, as have also the vertical engines. The new engines will be direct connected to the cement mills as in the previous equipment.

THE B. M. OSBUN CO., Commercial National Bank Bldg., Chicago, is a new company organized to handle and deal in machinery and mechanical equipment. It already has arrangements to handle the Ross mechanical stoker, Mietz & Weiss gas and oil engines, Dayton pumps, etc. President, B. M. Osbun; Vice-President, W. A. Ross; Secretary, Edward Rosing.

BARGE CANAL.—Albany, N. Y.—Bids were received as follows on March 31 by F. C. Stevens, Supt. of Public Works: For Contract No. 29, which is for improving the Erie canal from Station 5130 near Sterling Creek, to the Oneida-Herkimer County line, length, four miles; and Contract No. 32, which is for constructing lock gates, needle beams, needles and lock valves on Contracts Nos. 3, 25 and 27, Champlain Canal: Contract No. 29: Engineer's estimate, $812,350; Acme Engineering & Contracting Co., Schenectady, N. Y., $799,914; MacArthur Bros. Co., 11 Pine St., New York, $760,620; Shanley-Morrissey, Inc., 527 Fifth Ave., New York, $825,492; Scott Bros., Baldwinsville, N. Y., $754,896; MARYLAND DREDGING & CONTRACTING CO., Baltimore, Md., $683,714; Snare & Triest, 143 Liberty St., New York, $780,662; E. M. Graves, Cleveland, Ohio, $718,310; Lathrop, Shea & Henwood, and Transit & Construction Co., Buffalo, N. Y., $744,119.

For Contract No. 32: Engineer's estimate, $59,820; PENN BRIDGE CO., Beaver Falls, Pa., $46,797; Merrill-Ruckgaber Co., 50 Church St., New York, $54,991; Snare & Triest Co., 143 Liberty St., New York, $54,925.

No bids were received for Contract No. 36, which is for furnishing winches for movable dams on the Mohawk and Genesee rivers.

Contract No. 29 was awarded to the MARYLAND DREDGING & CONTRACTING CO., of Baltimore, Md., at $683,714; and Contract No. 32 was awarded to the PENN BRIDGE CO., Beaver Falls, Pa., at $46,797. Itemized bids will be given next week under Contract Prices.

U. S. POSSESSIONS AND CUBA.

CULVERT FORMS.—Panama.—Bids will be received until April 10 by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for furnishing steel culvert forms. Circular No. 501-A.

PUMP, ETC.—Panama.—Bids will be received until April 21 by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer Isthmian Canal Comn., Washington, D. C., for furnishing centrifugal pump, steel and iron castings, steel forgings, pig iron, copper, wire cable, steel and brass tubing, pipe and fittings, etc. Circular No. 500.

SUPPLIES.—Panama.—Bids will be received until April 10 by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for furnishing supplies during the fiscal year, June 30, 1910, including steel rails, angle bars, tie plates, chain, wire cable, wire, iron and steel pipe, steel, brass and copper tubing, lead pipe, copper, brass, bronze, pig tin, sheet lead and pig aluminum. Circular No. 409.

PUMPS.—Panama.—Bids were received as follows on April 1, at the office of the Isthmian Canal Commission, Washington, D. C., for furnishing three 20-in. relay dredging pumps direct-connected to alternating-current motors, and traveling cranes for same: Camden Iron Works, Philadelphia, $44,240; 165 days; D'Olier Engineering Co., Philadelphia, $25,674; 180 days. Manning, Maxwell & Moore, New York, $34,291; delivered Sept. 1. Watson-Stillman Co., 50 Church St., New York, $22,830; Aug. 31. Ellicott Machine Co., Baltimore, $29,888; $28,500; Oct. 1. Cleveland Crane & Engineering Co., Cleveland, Ohio, cranes only, $2,100.

ENGINEERING MATERIAL PRICES.

TRACK FASTENINGS—

Pittsburg, f. o. b. cars—Angle bars, 1.40 to 1.50 cts.; spikes, standard sizes, 4½ × 9-16-in., at 1.80 cts. and smaller sizes at 2 cts. in carload and larger lots, with an advance of 5 cts. per 100 lbs. for less than carload, f. o. b. Pittsburg; bolts, square nuts, 2.65 to 2.75 cts.; hexagonal nuts, 2.80 to 2.90 cts.

RAILS, STEEL—

New York—at mill—New standard sections, $28; standard, second quality, $27 to $28; light sections, 12 to 14 lbs., $34 to $36. Per gross ton—Heavy melting steel scrap, $13 to $13.50; old steel rails, rerolling lengths, $15 to $15.50; relaying rails, $23 to $24; old iron rails, $18 to $18.50.

Pittsburg—Standard sections, at mill, $28; standard, second quality, $27 to $28; light rails, 25 to 45-lb. sections, $25; 20-lb., $26; 16-lb., $27; 12-lb., $28.

STRUCTURAL MATERIALS—

Pittsburg—f. o. b. mill—Beams and channels, 3 to 15-in., inclusive, 15 cts., net; I-beams over 15-in., 1.70 cts., net; angles, 3 to 6-in., inclusive, ¼-in. and up, 1.60 cts., net; angles, over 6 ins., 1.70 cts., net; angles, 3 × 3 ins. and up, less than ¼-in., 1.50 cts., base, half extras, steel bar card; tees, 3-in. and up, 1.65 cts., net; zees, 3-in. and up, 1.60 cts., net; angles, channels and tees under 3-in., 1.50 cts., base, half extras, steel bar card; deck beams and bulb angles, 1.90 cts., net; hand rail tees, 3 cts.; net; checkered and corrugated plates, 3 cts., net.

Chicago—at mill—Beams and channels, 3 to 15-in., inclusive, 1.78 cts.; angles, 3 to 6-in., ¼-in. and heavier, 1.78 cts.; angles larger than 6-in., 1.88 cts.; beams, larger than 6-in., 1.88 cts.; beams, larger than 15-in., 1.8 cts.; zees, 3-in. and over, 1.78 cts.; tees, 3-in. and over, 1.83 cts.

New York—at tidewater—Beams, channels, angles and zees, 1.76 cts.; tees, 1.81 cts. on beams, 18 to 24-in., and angles over 6-in., the extra is 0.10 cts.

PLATES AND SHEETS—

New York—at tidewater—Standard-sized plates—Sheared plates, 1.56 cts. to 1.76 cts.; flange plates, 1.66 cts. to 1.86 cts.; marine plates, 1.86 cts. to 2.06 cts.; fire box plates, 2.65 cts. to 3 cts., according to specifications.

Pittsburg—mill shipmnet—Tank plates, ¾-in. thick, 6¼ ins. up to 100 ins. wide, 1.60 cts., base; blue annealed sheets, No. 10 and heavier, 1.80 cts.; Nos. 11 and 12, 1.85 cts.; Nos. 13 and 14, 1.90 cts.; Nos. 15 and 16, 2 cts. Box annealed, Nos. 17 to 21, 2.25 cts.; Nos. 22 to 24, 2.30 cts.; Nos. 25 and 26, 2.35 cts.; No. 27, 2.40 cts.; No. 28, 2.50 cts.; No. 29, 2.60 cts.; No. 30, 2.70 cts.; galvanized sheets, Nos. 10 and 11, 2.45 cts.; Nos. 12 and 14, 2.55 cts.; Nos. 15 and 16, 2.65 cts.; Nos. 17 to 21, 2.80 cts.; Nos. 22 and 24, 2.95 cts.; Nos. 25 and 26, 3.15 cts.; No. 27, 3.35 cts.; No. 28, 3.55 cts.; No. 29, 3.70 cts.; No. 30, 3.95 cts.

IRON—

Pig Iron:

At New York—tidewater—			
Northern—			
No. 1 X foundry	$16.50	to	$16.75
No. 2 X foundry	16.00	to	16.25
No. 2 plain, foundry	15.50	to	15.75
Gray forge	15.00	to	15.50
Basic	15.75	to	16.25
Virginia—			
No. 1 foundry	16.65	to	17.10
No. 2 foundry	16.10	to	16.65
Basic	16.25	to	16.75
Southern—			
No. 1 foundry	15.75	to	16.25
No. 2 foundry	15.25	to	15.75
No. 3 foundry	14.75	to	15.25
No. 4 foundry	14.50	to	15.00
No. 1 soft	15.75	to	16.25
No. 2 soft	15.25	to	15.75
Gray Forge	14.00	to	14.50
Mottled	13.95	to	14.25
At Chicago—f. o. b.—			
Lake Superior charcoal	19.50	to	20.00
Northern—			
Coke foundry, No. 1	17.00	to	17.50
Coke foundry, No. 2	16.50	to	17.00
Coke foundry, No. 3	16.00	to	16.50
Scotch, No. 1	17.50	to	18.00
Southern—			
Coke, No. 1	16.35	to	16.85
Coke, No. 2	15.85	to	16.35
Coke, No. 3	15.35	to	15.85
Coke, No. 4	14.85	to	15.35
Coke, No. 1 soft	16.35	to	16.85
Coke, No. 2 soft	15.85	to	16.35
Gray forge	14.35	to	14.85
Mottled	14.10	to	14.60
Malleable Bessemer	16.50	to	17.00
Standard Besemer	17.90	to	18.40
Jackson County and—			
Kentucky Silvery, 6%	19.90	to	20.40
Kentucky Silvery, 8%	20.90	to	21.40
Kentucky Silvery, 10%	22.90	to	23.40
At Philadelphia—			
Eastern Pennsylvania—			
No. 2 X Foundry	16.25	to	16.50
No. 2 Plain	15.75	to	16.00
Virginia—			
No. 2 X Foundry	16.75	to	17.00
No. 2 Plain	16.25	to	16.75
Gray forge	15.25	to	15.50
Basic	....	to	15.50
Low Phosphorus	....	to	21.00
At Pittsburg—			
Prices all f. o. b. Pittsburg—			
No. 2 foundry	14.90	to	15.15
Gray forge	14.40	to	14.65
Bessemer iron	...	to	16.50
Ferromanganese	...	to	45.95
Ferrosilicon	62.25	to	62.50

Cast-iron Pipe:

New York—Carload lots, net tons, 6-in., at tidewater, $24.

Chicago—4-in. water pipe, $27.50; 6-in. to 12-in., $26.50; over 16-in., $24.50, with $1 extra for gas pipe.

MISCELLANEOUS MATERIALS—

Copper:

Lake, 12.87½ to 13.12½ cts.; electrolytic, 12.50 to 12.62½ cts.; casting, 12.37½ to 12.50 cts.

Lead: New York, spot, 4.05 to 4.10 cts.
Spelter: New York, spot, 4.75 to 4.77½ cts.
Tin. New York, spot, 29 to 29.20 cts.

Readers' Wants

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

ELECTRICAL ENGINEERING EQUIPMENT.—St. Georges, Bermuda.—R. L. Sylvester desires catalogs and descriptive booklets of electrical engineering equipment and supplies.

SEWER PIPE GASKETS, Eagle Grove, Iowa., N. Pontious writes us for catalogs and information concerning gaskets for sewer pipe joints or any device to facilitate the cementing of such joints.

EXAMINATIONS.

LABORATORY ASSISTANT.—New York, N. Y.—The Municipal Civil Service Commission, 299 Broadway, New York, will receive applications until 4 p. m., April 12, for the position of Laboratory Assistant (male and female). The examination will be held on May 4 at 10 a. m. There is one vacancy. Salary, $600 to $900 a year. Minimum age, 18 years. F. A. Spencer, Secy.

INDUSTRIAL NOTES.

THE OFFICES of the Standard Bridge Tool Co. have been removed from 709 Curry Bldg. to 716 Ferguson Bldg., Fourth Ave., Pittsburg, Pa.

J. G. WHITE & COMPANY, INCORPORATED, announces that it has opened a branch office in the Alaska-Commercial Building, San Francisco, Cal. Mr. Henry A. Lardner, who has been prominently connected with this company for many years, will be in charge as Manager.

ORDERS for Analytical Balances with the Ainsworth Improved Multiple Rider Carrier have been received by Wm. Ainsworth & Sons, Denver, Colo., U. S. A., from the United States Food Inspection Laboratory, Denver, Colo., the United States Mint, San Francisco, Cal., and the Watertown Arsenal, Watertown, Mass.

THE OWNERS of the New Belnord Apartment House, at 86th Street and Broadway, New York City, which is to be one of the largest apartment houses yet built, have recently placed an order with the American Engine Co., of Bound Brook, N. J., for three Anglo-Compound Engines, one of 500 HP., one of 400 HP. and one of 160 HP.

THE ROAD AND TRACK SUPPLY ASSOCIATION, which arranges for the exhibits held at the annual meetings of the engineers of maintenance of way and the roadmasters associations, has elected officers as follows: President, W. F. Schleiter (Dilworth, Porter & Co.), Pittsburg, Pa.; Vice-President, T. W. Snow (Otto Gas Engine Works), Chicago; Secretary, John N. Reynolds ("Railroad-Age Gazette"), Chicago.

MR. W. P. PRESSINGER, who recently resigned as General Manager of the Compressor Department of the Chicago Pneumatic Tool Co., has organized the W. P. Pressinger Company to handle the Vacuum Cleaning Machines, both portable and stationary, made by the Keller Mfg. Co., of Philadelphia, Pa., and formerly sold by the Chicago Pneumatic Tool Co. The new company has opened offices and salesrooms at No. 1 West 34th St., New York City, and will establish local agencies at all distributing points throughout the eastern territory.

THE PORTLAND CEMENT CO., of Portland, Colo., has purchased a 600-KW., three-phase, 60-cycle Westinghouse turbo generator equipment, with a Le Blanc condenser, a rotary converter and a switchboard. These are to be installed as an addition to their present plant and serve rather as a gain in economy than in output. This will give an increased power capacity to be used on additional grinding machinery. The turbine and condenser are now being built by The Westinghouse Machine Co., and the electrical apparatus by the Westinghouse Electric & Mfg. Co.

THE CROCKER-WHEELER CO., of Ampere, N. J., recently received an order through its Denver office for a number of small motors, which will be installed in the plant of the Cox-Clark Engraving Co., Barclay Bldg., Denver. The motors will be used for individual drive on engraving and electrotyping machinery as follows: A 3-HP. motor driving a planer; a 1-HP. motor driving a router; a 1-HP. motor driving a saw; ½-HP. each on a trimmer, a beveler and a tub rocker, and a ⅛-HP. motor driving a jig saw and drill. These are all 230-volt direct-current motors of the celebrated form L type, which is built in sizes from 1-20 to 7½ HP.

THE UNDERPINNING COMPANY has recently been organized to take over the exclusive control of the Breuchaud Patents for the sectional method of underpinning buildings. These patents cover a method of under pinning which briefly consists in utilizing the weight of the walls to be underpinned as a reaction for a hydraulic jack in forcing down iron pipes, or cylinders for pneumatic caissons, to a depth at which the foundations will be secure from settlement during the subsequent building operations in its vicinity. It is often possible to effect a considerable saving of time in the completion of a building by underpinning the adjoining structures before the old building, which occupies the site of the work, is torn down. On the Trust Company of America Building, New York City, a saving of two months was effected by underpinning the adjoining buildings in this manner by the Breuchaud method. The officers of the new company are as follows: Jules Breuchaud, President; Francis L. Pruyn, Vice-President; John B. Goldsborough, Treasurer, with offices at No. 290 Broadway, New York City, N. Y.

THE FORMER AMERICAN BOILER ECONOMY CO., of Philadelphia, manufacturers of the Copes Boiler Feed Regulator and Copes Pump Governor, has been consolidated with the Northern Equipment Co., Old Colony Bldg., Chicago, Ill., which will assume all obligations of the former company, including guarantees to replace free of cost any part of any Copes Regulator that may develop a defect within five years from the date of purchase. The branch offices of the American Boiler Economy Co., viz.: Tribune Bldg., New York City; Oliver Bldg., Boston; 226 East Pleasant St., Baltimore, and the Frick Building Annex, Pittsburg, will be continued under the style of the Northern Equipment Co., while the sale of Copes Regulators will be handled in Philadelphia by the Adjustable Grate Bar Co., North American Bldg. The Northern Equipment Co. announces that it will continue to install the Copes Regulators on 60 days' free trial. The following recent sales to prominent concerns are mentioned: Nichols Copper Co., the Delaware & Hudson R. R. Co., the Clark Thread Co., the Consolidated Gas Co., of New York, and the Boston Elevated Ry. Co.

TRADE PUBLICATIONS.

HOLLOW CONCRETE FLOOR BEAMS.—Climax Co., 1307 Security Bldg., 188 Madison St., Chicago. Paper; folder; 6¼ × 3½ ins.; pp. 6; illustrated.

The Climax floor beams are hollow rectangular beams of reinforced concrete, laid side by side to form a floor with flat ceiling on the under side.

LEAD-LINED PIPE.—Lead Line Iron Pipe Co., Wakefield, Mass. Paper; 4 × 6¼ ins.; pp. 14; illustrated.

The general characteristics and various uses of this well-known pipe are briefly set forth in this catalog. Prices for both lead-lined and tin-lined pipe and fittings are given.

SWITCHSTAND.—Frank M. Foster, 515 West First Ave., Columbus, Ohio. Paper; 6 × 9 ins.; pp. 15; illustrated.

The Foster switchstand is operated by gears, so arranged that none are in mesh except when making the movements. The switch is locked in either position, and the switchstand is so interlocked with the signals that these cannot be operated until the switch is in position and locked.

PERFORATED METAL SCREENS.—Allis-Chalmers Co., Milwaukee, Wis. Paper; 8 × 10½ ins.; pp. 44; illustrated.

These screens are for stone, ore, etc., with perforations of sizes and shapes to suit various purposes. They are of steel, brass, copper, etc., and range from No. 30 gage to ½-in. in thickness. Diagrams show the size and spacing of holes for different work, and there are illustrations of cylindrical, conical and hexagonal screens. Also screens with graded perforations for sizing or separating the material.

THREE-POSITION BLOCK SIGNALS.—The Hall Signal Co., New York and Chicago. Paper; 5¼ × 8¼ ins.; pp. 15; illustrated.

This pamphlet describes the electric automatic block signal installation of the Boston & Albany Ry., in which the three-position semaphore is used, with the blade moving upward from the "stop" (horizontal) position to the "caution" (inclined) and "proceed" (vertical) positions. The apparatus is described and there are line engravings showing the track plan, signal locations, electrical connections, etc.

For other Proposal Advertisements see pages 47, 48, 50, 52, of Advertisements and Construction News page 118.

BRICK PAVEMENT.

Tomah, Wis.

Notice is hereby given that sealed bids will be opened and considered by the Committee of Public Works of the City of Tomah, Monroe County, Wisconsin, at two o'clock P. M., on the 16th day of April, 1909, in the Council Chamber at the City Hall of said city, for the construction of a brick pavement and appurtenances in said city, all to be constructed in accordance with the plans and specifications adopted by the City Council, and on file in the office of the City Clerk, Tomah, Wis., said office being in Council Chamber in said city.

All bids must be on file with the City Clery by one o'clock P. M. on said day, and all bidders must enclose with their respective bids a contract for said work, duly executed on the part of the bidder, according to the form of contract now on file at said office of City Clerk, Tomah, Wis., also a duly executed bond of bidder, for One Thousand Dollars ($1,000.00), conditioned on the faithful performance of said contract, should the proposal of bidder be accepted by City and contract entered into, with two sureties; both residents and freeholders in the State of Wisconsin, who shall both justify in amount of $1,000.00.

Forms for proposal, contract and bond will be furnished bidders by City Clerk.

Signed: R. E. KYLE,
W. E. BARNHART,
GEORGE SCHULTZ,
Committee of Public Works.
Attest, D. J. ALLER, City Clerk.

BRICK PAVEMENT AND MACADAM ROADWAY.

Saranac Lake, N. Y.

Sealed bids will be received by the Board of Village Trustees in the office of the Village Clerk until one o'clock P. M. on Tuesday, April 20th, 1909, for the grading, curbing, draining and paving of certain streets with vitrified brick and the construction of macadam roadway on certain other streets.

The approximate quantities are about as follows.

7,000 sq. yds. of vitrified brick pavement, concrete base.
22,500 sq. yds. macadam roadway.
13,500 lineal feet of concrete gutter.
10,000 lineal feet of concrete curb.
6,000 lineal feet of storm water sewers.
4,500 cu. yds. of excavation.

Plans may be seen at the office of the Village Engineer and copies of contract, specifications and bidding sheets may be had on application to the Village Clerk or to the Engineer.

Proposals must be made out on the forms furnished by the Village and must be accompanied by a certified check for five hundred ($500.00) dollars, drawn payable to Isaiah Vasburgh, Village Pres.

ISAIAH VASBURGH,
Village Pres.
SEAVER A. MILLER, Village Clerk.
JOHN L. COLLINS, Eng.

SEWERS.

Haverstraw, N. Y.

Sealed proposals will be received at the office of Alexander Potter, Consulting Engineer, 143 Liberty St., New York City, until Thursday, April 15th, 1909, for the laying of 1,200 feet of 12-inch cast-iron submerged pipe for a sewer outlet for the Village of Haverstraw, New York. The work includes the dredging of a trench 15 feet below mean low water, the depth of the trench at the shore being 12 feet, and at the outer end of the pipe, 7 feet.

Plans can be seen at the office of the engineer.

ALEXANDER POTTER,
Consulting Engineer.

U. S. ENGINEER OFFICE, Louisville, Ky., April 1, 1909.—Sealed proposals for concrete walls, etc., at lock at Grand Rapids, Wabash River, will be received here until 12, noon, standard, central time, May 1, 1909, and then publicly opened. Information furnished on application. LYTLE BROWN, Capt., Engrs.

WATER-WORKS IMPROVEMENTS.

Altoona, Pa.

Sealed proposals will be received by the Board of Water Commissioners of the City of Altoona, Pa., until 12 o'clock noon on the 29th day of April, 1909, for the continuing of the construction on Lake Altoona, with accessories as shown on the plans or called for in the specifications.

The principal items under this contract will be about 360,000 cubic yards of embankment and about 21,000 cubic yards of rubble concrete.

Plans can be seen at the office of the Board or at the office of Knight & Hopkins, Consulting Engineers, Rome, N. Y.

The Board hereby reserves the right to reject any or all bids, or accept any that in their judgment will be for the best interest of the city.

A bond satisfactory to the Board in amount and sureties will be required of those to whom the contract may be awarded.

Cash or certified check, made payable to the order of the Board of Water Commissioners, of Altoona, Pa., to the amount of $1,000.00 must be deposited by each bidder and accompany his bid as a guarantee that in case the contract is awarded him he will, within seven days thereafter, execute said contract.

Bids must be sealed and addressed to the Board of Water Commissioners, of Altoona, Pa., and marked on the outside of the envelope enclosing them, "Proposal for continuing construction of Lake Altoona."

Signatures of members of the Board,
H. K. McCAULEY, Chairman;
H. H. RIGGIN,
J. A. ELDER,
C. B. CAMPBELL, Secretary.

MACADAM PAVING.

Hackettstown, N. J.

Sealed bids will be received by a committee of the Board of Chosen Freeholders of the County of Warren, at the American House, Hackettstown, New Jersey, on Thursday, April 29, 1909, at 2 o'clock in the afternoon, not before and not after, for macadamizing the public road beginning at the westerly line of the Town of Hackettstown, east of Newburgh, and running a southwesterly course through the Townships of Mansfield and Washington to the bridge over the D., L. & W. R. R. tracks at Port Colden, a distance of 45,341 feet, or 8.58 miles. Plans, profile, cross sections and specifications can be seen at the American House, Hackettstown, N. J., and at the residence of J. R. Thatcher, Director, Washington, N. J. Each bidder must accompany his bid with a certified check for the sum of One Thousand Dollars ($1,000.00), payable to the order of J. R. Thatcher, Director of the Board of Chosen Freeholders, as a guarantee that if the contract shall be awarded to him, he will, when required by said Board, execute an agreement in writing to perform the work according to the specifications. Failing to do so, he shall forfeit said check, the same to be considered as liquidated damages.

The Board of Chosen Freeholders reserves the right to reject any or all bids.

J. R. THATCHER,
Director.
Washington, N. J., April 6, 1909.

DAM AND RESERVOIR.

Hazleton, Pa., April 5, 1909.

Sealed bids or proposals will be received by the Diamond Water Company until noon of April 22d, 1909, for building a dam and reservoir on Wolff sRun, near Hazleton. Plans and specifications are on file in office of company. Bidders must personally visit the location of the work. Proposals will also be received for furnishing, trenching and laying; and also for trenching and laying only; about four (4) miles of sixteen (16) inch cast-iron water pipe, with about ten (10) tons of special castings.

All bids or proposals must be upon forms provided by company. The company reserves the right to reject any and all bids.

P. F. BOYLE,
President.

BRICK PAVING AND MACADAMIZING.

Harrison, N. Y.

Sealed proposals for the brick paving of Halstead Avenue, in the town of Harrison, N. Y., will be received at the office of the Town Clerk of the Town of Harrison, Westchester County, N. Y., until two o'clock P. M., of the 23d day of April, 1909.

There will be required approximately, 19,200 square yards of brick paving to be laid, together with curbing, storm-water drains and other appurtenances.

At the same time and place, proposals will be received for the macadamizing of several streets or roads in the town of Harrison, aggregating a distance of approximately four (4) miles.

Each bid must be accompanied by a certified check for an amount equal to five (5) per cent. of the amount of the bid.

A Surety Company bond for an amount equal to twenty (20) per cent. of the bid will be required.

The Board of Town Officials reserves the right to reject any and all bids. Plans and specifications may be seen and bidding forms obtained at the office of the Town Clerk, Harrison, N. Y., or at the office of John M. Farley, Engineer, White Plains, N. Y.

BENJAMIN IRVING TAYLOR,
Supervisor.
FRANK E. COXE,
Town Clerk.

SURFACING AND GRADING BOSTON EMBANKMENT.

COMMONWEALTH OF MASSACHUSETTS.
CHARLES RIVER BASIN COMMISSION.

Sealed proposals will be received at the office of the Charles River Basin Commission, 367 Boylston Street, Boston, Mass., until 2.30 o'clock P. M., of Monday, April 26, 1909, for surfacing and grading Section 1 of the Boston Embankment which extends along the Boston side of the Charles River from the Cambridge bridge to Berkeley Street. The work will require about 15,000 linear feet of trench in which to lay pipes which will be furnished by the Commission; 7 manholes; 63 catch-basins; 4,200 linear feet of granite edgestones; 7,000 cubic yards of gravel; 1,400 square yards of vitrified brick gutters; 2,200 tons of broken stone; 4,500 square yards of granolithic walks, and 20,000 cubic yards of loam. Gravel and loam will be measured in place. The work to be done includes the laying of pipes for water supply, drains and electric wires; the construction of service boxes, manholes and catch-basins; laying granite edgestones and brick gutters; building gravel and granolithic walks and bituminous macadam roadway; and placing loam upon the embankment and seeding it for grass. Pamphlets containing further information for bidders, forms of proposal, contract and specifications will be ready about April 12 and will be mailed to contractors who apply to the Chief Engineer, or may be obtained at his office, 367 Boylston Street, Boston, where also plans may be seen. The printed form must be used in making proposals. The Commission reserves the right to reject any or all proposals and to accept the proposal deemed best for the Commonwealth. HENRY D. YERXA, Chairman; JOSHUA B. HOLDEN, EDGAR R. CHAMPLIN, Charles River Basin Commission; HIRAM A. MILLER, Chief Engineer; WILLIAM S. YOUNGMAN, Secretary.

OFFICE OF CONSTRUCTING QUARTERMASTER, Fort Wood, N. Y. H., April 2, 1909.—Sealed proposals in triplicate for "Top Soil and Seeding," "Sodding and Repairing Terraces" and "Repairing Granolithic Walks" at this post will be received here until 1.30 P. M., April 12, 1909, and then opened. Information furnished on application. The U. S. Reserves the right to reject any or all bids or any part thereof. Envelopes containing proposals should be marked "Proposals for Top Soil, Seeding, Sodding, etc.," and be addressed to WM. W. BESSELL, Constg. Qr. Mr.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., March 31, 1909.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 12th day of May, 1909, and then opened, for the construction of the United States Post Office and Court House at Danville, Illinois, in accordance with drawings and specification, copies of which may be had at the office of the Custodian at Danville, Illinois, or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

U. S. ENGINEER OFFICE, Army Building, New York City, April 6, 1909.—Sealed proposals for removing the wreck of the Steamship Daghestan will be received at this office until 12 o'clock noon, May 6, 1909, and then publicly opened. Information furnished on application. S. W. ROESSLER, Lt. Col., Engrs.

OFFICE OF THE CONSTRUCTING QUARTERMASTER, Madison Barracks, N. Y., April 1st, 1909.—Sealed proposals, in triplicate, will be received here until 2 o'clock P. M., May 1st, 1909, and then opened, for the construction, including plumbing, heating, electric wiring and electric light fixtures, of one single set Field Officers' quarters and one double set of Non-commissioned Officers' quarters at Madison Barracks, N. Y. Information furnished on application. Intending bidders should forward certified check for $25.00, payable to the Constructing Quartermaster, to secure plans and specifications, said check to be returned when plans, etc., are returned. The U. S. reserves the right to accept or reject any or all bids. Envelopes containing bids should be marked "Proposals for Public Buildings at Madison Barracks, N. Y., and addressed to the CONSTRUCTING QUARTERMASTER.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., April 5, 1909.—Sealed proposals will be received at this office until 3 o'clock p. m., on the 30th day of April, and then opened, for bronze railings and lamp standards for the East Front of the Treasury Building, Washington, D. C., in accordance with the drawings and specification, copies of which may be had at this office. JAMES KNOX TAYLOR, Supervising Architect.

U. S. ENGINEER OFFICE, New London, Conn., April 5, 1909.—Sealed proposals for dredging in Connecticut River, Conn., will be received here until 12 o'clock noon, May 5, 1909, and then publicly opened. Information on application. HARRY TAYLOR, Maj. Engrs.

Situations Wanted

Civil Engineers.

CIVIL ENGINEER and surveyor, with 15 years' experience. Salary $20 week. Will go anywhere. Address "L. B. 14," Engineering News, New York. 14-2t

CIVIL ENGINEER, graduate (32), position in New York City. Nine years' general experience designing, estimating, constructing, buildings, bridges, tanks, sewer, water-works, dredging, dams, machinery, railroad, industrial plants. Executive and business ability. Address "K. A. 14," Engineering News, New York. 14-tf

Bridge and Structural Engineers.

STRUCTURAL and mechanical engineer, graduate, wide experience, wants responsible position. Address "Z. 11," Engineering News, New York. 14-2t

Superintendents, Misc., etc.

CONCRETE or Construction Foreman with long experience on reinforced concrete buildings and other lines of construction, able to work from blue print. Can show results. A1 reference. Address "E. 10," Engineering News, New York. 14-4t

Situations Open

WANTED—Several experienced structural draftsmen for railway bridge and building work. Address "W. H. P.," No. 11 Poplar St., Detroit, Mich. 14-2t

WANT an allround good man, capable of locating, surveying and constructing, completing several short line connections; must be capable of building the several roads without suggestions. Could use a competent, young, active engineer, for locating additional lines. Answer with particulars. J. L. STRAUS, Weston, New Jersey. 14-1t

CIVIL ENGINEER to take charge of field party. Technical graduate preferred. Reply by letter, stating qualifications, experience and salary expected. "R. P. M.," 527 Fifth Ave., New York. 14-1t

Miscellaneous Wants

TWO STRUCTURAL ENGINEERS would like to hear from architects and builders, structural design and preparation of shop details for bridges and buildings. (Estimates cheerfully given.) Address "F. A. 14," Engineering News, New York. 14-1t

WANTED—$15,000 by reliable engineering and contracting firm; 10% of annual profits and guarante 6% per annum on money invested. References exchanged. Address "I. A. 14," Engineering News, New York. 14-1t

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